

ATTITUDES AND BEHAVIORS OF  
REHABILITATION COUNSELING  
STUDENTS AND GRADUATES TOWARD  
STIGMATIZED PERSONS.

WELSH RICHARD LEO

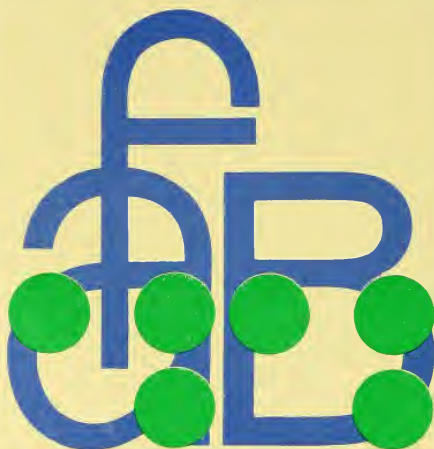
DEGREE DATE: 1973

University  
Microfilms  
International

Published on demand by

300 N. ZEEB ROAD, ANN ARBOR, MI 48106  
18 BEDFORD ROW, LONDON WC1R 4EJ, ENGLAND

BF698  
W465  
A+84



**M.C. MIGEL MEMORIAL LIBRARY**  
**American Foundation for the Blind**

15 West 16th Street, New York, New York  
10011



Digitized by the Internet Archive  
in 2013





**This is an authorized facsimile  
and was produced by microfilm-xerography  
in 1979 by  
UNIVERSITY MICROFILMS INTERNATIONAL  
Ann Arbor, Michigan, U.S.A.  
London, England**



## INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again -- beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

**Xerox University Microfilms**

300 North Zeeb Road  
Ann Arbor, Michigan 48106



**74-15,632**

**WELSH, Richard Leo, 1944-  
ATTITUDES AND BEHAVIORS OF REHABILITATION  
COUNSELING STUDENTS AND GRADUATES TOWARD  
STIGMATIZED PERSONS.**

**University of Pittsburgh, Ph.D., 1973  
Education, guidance and counseling**

**University Microfilms, A XEROX Company, Ann Arbor, Michigan**



**ATTITUDES AND BEHAVIORS OF REHABILITATION  
COUNSELING STUDENTS AND GRADUATES  
TOWARD STIGMATIZED PERSONS**

**By**

**Richard L. Welsh**

**B.A., St. Vincent College, 1966**

**M.A., Western Michigan University, 1968**

**Submitted to the Graduate Faculty in the School  
of Education in partial fulfillment of  
the requirements for the degree of  
Doctor of Philosophy**

**University of Pittsburgh**

**1973**

BF698  
W465  
A484  
copy one



# FINAL REVIEW COMMITTEE

Faculty Member	Department	School
<i>Anne Golin</i> Chairman, Anne Golin, Ph.D.	SE&R	Education
<i>Joseph Newman</i> Joseph Newman, Ph.D.	SE&R	Education
<i>Ralph Peabody</i> Ralph Peabody, Ed.D.	SE&R	Education
<i>Milton Seligman</i> Milton Seligman, Ph.D.	SE&R	Education
<i>Charles Stegman</i> Charles Stegman, Ph.D.	Ed. Res.	Education

Date November 28, 1973



## FOREWORD

The writer wishes to express his gratitude to the persons who have assisted in the development and completion of this study. A special thank-you is extended to Dr. Anne Golin, the Chairman of the Dissertation Committee for the guidance and insight provided during the course of this research and for the encouragement and direction offered during the past three years. Dr. Golin's interest in the psychosocial aspects of disability has stimulated the writer's interest in that area and has contributed to the selection of the focus for this study.

The writer also extends his sincere gratitude to the other members of the dissertation committee: Dr. Joseph Newman, Dr. Ralph Peabody, Dr. Milton Seligman, and Dr. Charles Stegman. Their suggestions, time, and support were greatly appreciated.

Mr. Kenneth Wissmann of the Office of Measurement and Evaluation provided invaluable assistance in the analysis of the data for the study, and his help was sincerely appreciated.

The generous cooperation of the students and rehabilitation counselors who served as subjects must also be acknowledged. Their willingness to become involved was encouraging and essential in the completion of this effort. Similarly the agency supervisors who provided ratings for some of the subjects was necessary for the success of the study and their participation is gratefully acknowledged.

The writer also extends a word of thanks to the Administrators of the Western Pennsylvania School for Blind Children for the use of their facility; to Ronald and Karen Affinito who served as judges for one of the attitude measures; and to Miss Maureen Welsh who operated the timer and assisted with the typing.

7/17/79 P.O. D 37018 \$22.40



Finally, the writer dedicates his efforts in this research to the members of my family who have encouraged me, to my children, Patrick and Kathleen, who reluctantly relinquished their claim on my time during this period, and to my wife, Dolores, whose typing, encouragement and unequivocal faith in me have enabled me to complete both this research and my course of study.



# TABLE OF CONTENTS

	Page
FOREWORD. . . . .	ii
LIST OF TABLES. . . . .	vii
I. THE PROBLEM . . . . .	1
A. Introduction. . . . .	1
B. Statement of the Problem. . . . .	2
C. Review of Related Literature. . . . .	3
1. General Attitudes Toward the Stigmatized. . . . .	3
a. Negative Attitudes. . . . .	4
b. Neutral Attitudes . . . . .	10
c. Positive Attitudes. . . . .	11
d. Discrepancies between Verbal Attitudes and Overt Behavior. . . . .	12
e. Differential Treatment of the Stigmatized . . . . .	14
2. Attitudes of Rehabilitation Personnel Toward Stigmatized Persons. . . . .	17
a. Indications of Differential Attitudes . . . . .	17
b. Consequences of Differential Attitudes. . . . .	21
c. Impact of Professional Training . . . . .	24
3. The Measurement of Attitudes. . . . .	26
a. Definitions and Dimensions of Attitudes . . . . .	26
b. Types and Characteristics of Measuring Instruments . . . . .	28
i. Self-report questionnaires. . . . .	30
ii. Measures of overt behavior. . . . .	34
iii. Partially structured stimuli. . . . .	37





	Page
iv. "Objective" tasks . . . . .	38
v. Physiological reactions . . . . .	40
vi. "Bogus pipeline" . . . . .	42
c. Relationship Between Verbal Attitudes and Overt Behavior . . . . .	43
4. The Measurement of Attitudes Toward the Stigmatized . . . . .	49
a. Attitude Measures . . . . .	50
b. Eliciting Stimuli . . . . .	55
c. Multidimensional Approaches . . . . .	58
5. Summary of Literature Review and Rationale for the Present Study . . . . .	64
D. Hypotheses . . . . .	66
II. PROCEDURES . . . . .	68
A. Subjects . . . . .	68
B. Verbal Measures of Attitudes . . . . .	70
1. Disability Factor Scales - General . . . . .	70
2. The Semantic Differential Rating Scale . . . . .	73
3. Analysis of Verbal Immediacy . . . . .	74
C. The Eliciting Stimuli . . . . .	76
D. Measurement of Behavior Toward Stigmatized Persons . . . . .	77
E. Additional Procedural Details . . . . .	82
F. Rating of Counselor Effectiveness . . . . .	83
III. RESULTS . . . . .	85
A. Attitudes Toward Stigmatized and Non-Stigmatized Stimulus Persons and Among Groups of Counselors . . . . .	86
1. Semantic Differential . . . . .	86



	Page
2. Analysis of Verbal Immediacy. . . . .	88
3. Behavior Measures . . . . .	88
4. Disability Factor Scales. . . . .	92
B. Relationship Between Rating of Counselor Effectiveness and Measures of Attitudes Toward Stigmatized Persons. . . . .	96
C. Relationships Among Attitude Measures . . . . .	98
IV. DISCUSSION. . . . .	106
A. The Existence of Attitudes Toward Stigmatized and Non-Stigmatized Persons . . . . .	106
B. Level of Training and Attitudes Toward Stigmatized Persons . . . . .	112
C. Relationship Between Ratings of Counselor Effectiveness and Attitudes Toward Stigmatized Persons . . . . .	114
D. Relationships Among Attitude Measures . . . . .	116
V. CONCLUSIONS AND IMPLICATIONS. . . . .	125
A. Conclusions . . . . .	125
B. Implications of the Study and Directions for Future Research . . . . .	126
VI. SUMMARY . . . . .	130
APPENDICES:	
APPENDIX A: Opinions About the Disabled. . . . .	134
APPENDIX B: Examples of Verbal Immediacy and Semantic Differential Measures . . . . .	139
APPENDIX C: Stimulus Information . . . . .	140
APPENDIX D: Counselor Effectiveness Rating Scale . . . . .	141
APPENDIX E: Raw Scores for Forty Subjects on Six Attitude Measures and Twenty Subjects on Rating of Counselor Effectiveness . . . . .	144
BIBLIOGRAPHY. . . . .	151



# LIST OF TABLES

Table	Page
4.1 Repeated Measures Analysis of Variance for Semantic Differential Type of Rating Scale. . . . .	86
4.2 Repeated Measures Analysis of Variance for Analysis of Immediacy Scores . . . . .	88
4.3 Repeated Measures Analysis of Variance for Level on Intensity Scores. . . . .	89
4.4 Repeated Measures Analysis of Variance for Duration Scores. . . . .	90
4.5 Repeated Measures Analysis of Variance for Total Noise Scores . . . . .	91
4.6 Mean Scores for Six Conditions on Five Attitude Measures. . . . .	91
4.7 Mean Scores for Four Levels of Training on Five Attitude Measures . . . . .	92
4.8 Differences Among Levels of Training for the DFS Factor Interaction Strain. . . . .	93
4.9 Differences Among Levels of Training for the DFS Factor Rejection of Intimacy . . . . .	93
4.10 Differences Among Levels of Training for the DFS Factor Generalized Rejection . . . . .	93
4.11 Differences Among Levels of Training for the DFS Factor Authoritarian Virtuousness. . . . .	94
4.12 Differences Among Levels of Training for the DFS Factor Inferred Emotional Consequences . . . . .	94
4.13 Differences Among Levels of Training for the DFS Factor Distressed Identification . . . . .	94
4.14 Differences Among Levels of Training for the DFS Factor Imputed Functional Limitations: Epilepsy . . . . .	95
4.15 Means and Standard Deviations of DI Scores by Levels of Training . . . . .	95
4.16 Correlation Coefficients for Ratings of Counselor Effectiveness with Five Attitude Measures in Each of Six Conditions . . . . .	98



Table	Page
4.17 Coefficients for Correlations Among DFS Factor Scores. . . . .	99
4.18 Correlation Coefficients for Five Attitude Measures and Seven DFS Factor Scores in Each of Six Conditions . . . . .	100





## I. THE PROBLEM

### A. Introduction

Historical and cross-cultural investigations have discovered that men have always reacted in a discriminative way toward those members of society who are in some way distinctive in their appearance and behavior or limited in their ability to be self-sufficient or to contribute to social efforts. Persons who elicit these discriminative reactions are said to be stigmatized. Goffman (1963) has identified three categories of stigma; (A) abominations of the body, (B) blemishes of individual character, and (C) the tribal stigma of race, nation, and religion. The differences which are singled out as undesirable, and therefore, handicapping, are often historically and culturally variable.

Rehabilitation is a social movement which is concerned with assisting individuals who possess stigmatizing conditions (Jaques, 1970). According to Freidson (1965), rehabilitation institutions carry on four activities. "First, they specify what personal attributes shall be called handicaps. Second, they seek to identify who conforms to their specifications. Third, they attempt to gain access to those whom they call handicapped. And fourth, they try to get those to whom they gain access to change their behavior so as to conform more closely to what the institutions believe are their potentialities." (Freidson, 1965, p. 71). Scott (1965) developed one of the implications of this conceptualization of rehabilitation.

Rehabilitation is the process of determining the form which deviance will take. It can be viewed as a socialization



process, the purpose of which is to prepare a disabled person to play a type of deviant role. The rehabilitator is the agent of socialization. He seeks to change the behavior of the disabled person in order to make it conform more closely to what the rehabilitator believes to be the potentialities and limitations of someone with this particular handicap (Scott, 1965, p. 135).

To the extent that rehabilitation decisions are based upon "What the rehabilitator believes to be the potentialities and limitations of someone with this particular handicap" as Scott asserted, the rights of the consumer of rehabilitation services are being denied. The rehabilitation services which each client receives should be determined to the greatest extent possible by an objective and valid assessment of that client's potentialities and limitations. Rehabilitation decisions should not reflect the attitudes and pre-formed beliefs of rehabilitation personnel.

There is a need, therefore, for rehabilitation counselors, who make the majority of decisions in rehabilitation settings, to be free from the cultural biases toward stigmatized persons as much as is possible; or, if not free, then aware of the prejudicial attitudes they may possess. It would seem to be necessary for rehabilitation counselor training programs to consider the attitudes toward deviant persons of potential counselor candidates and to evaluate the impact of the training program on the modification of these attitudes.

#### B. Statement of the Problem

The purpose of this study is to, first of all, investigate whether or not the students who are participating in the Rehabilitation Counselor Training Program at the University of Pittsburgh as well as graduates of that program possess differential attitudes toward stigmatized and non-stigmatized persons. A second purpose is to determine whether or not these attitudes are different for individuals at different levels of training as



rehabilitation counselors. A third purpose of the study is to determine whether these attitudes as measured by any or all of the measurement devices selected, are related to overt behavior exhibited by the rehabilitation counseling students toward stigmatized and non-stigmatized persons or to measures of counselor effectiveness.

The findings of this study relate to the selection of rehabilitation counseling students, to an understanding of the impact of rehabilitation counselor training programs on attitudes toward stigmatized persons, and to the methodology of measuring attitudes toward stigmatized persons.

### C. Review of Related Literature

The hypotheses for this study were generated from a review of the literature in several areas. First the literature dealing with the attitudes of people in general toward stigmatized persons was examined; and then the studies dealing with the attitudes of rehabilitation personnel toward stigmatized persons were reviewed. In addition, the literature dealing with the different methodologies for measuring attitudes was studied; and the methodologies used in the measurement of attitudes toward stigmatized persons were emphasized in a separate section of this literature review.

#### 1. General Attitudes Toward the Stigmatized

Viewed in the perspective of history and comparative cultures, there are great contrasts in the beliefs, customs, and attitudes which have guided man in his behavior toward those members of society who are disabled or in other ways distinctive in their appearance and behavior, or limited in their ability to be self-sufficient or to contribute to social efforts. Invariably, such behavior reflects the broader cultural values and beliefs which prevail at a particular time or place. (Straus, 1965, p. 2).

The variability in attitudes toward stigmatized persons which Straus referred to in the above quotation is not an unexpected finding



from an investigation which encompassed very broad historical and cultural boundaries. What is less expected is the variability in the conclusions drawn from studies of the attitudes toward stigmatized persons which have been published during the past 25 years. Although the majority of published studies indicate that stigmatized persons do elicit some type of negative reaction from other members of society, there are also investigations which seem to indicate that stigmatized persons elicit neutral and sometimes positive attitudes. The literature review which follows will group relevant studies according to whether their conclusions support the existence of negative, neutral, or positive attitudes toward stigmatized persons.

#### a. Negative attitudes

Several writers have suggested that stigmatized people are the target of negative prejudices and actions resulting from their differences. Barker, Wright, Meyerson, and Gonick (1953) concluded from their review that, "the state of blindness is universally perceived as highly disagreeable, and that blind persons frequently arouse ambivalent attitudes that produce unresolved conflicts in their relations with others" (Barker et al., 1953, p. 282). Gellman (1959) stated that prejudice against handicapped groups does exist, and he described four sources of the origin of this prejudice. Roether (1961) also asserted the existence of differential attitudes toward the handicapped, and he speculated on the development of these attitudes. Roether suggested that through depersonalized charity appeals, the general public has been conditioned to envision crippled children as pathetic helpless creatures warranting sympathy and charity. Wright (1960) has asserted that negative attitudes toward the disabled are expressed through stereotyping of the group in a manner similar to the stereotyping that is done in regard to many ethnic and religious minorities. The effect of





stigmatization on human interaction was most thoroughly explored by Goffman (1963). He stated:

The attitudes we normals have toward a person with a stigma, and the actions we take in regard to him, are well known, since these responses are what benevolent social action is designed to soften and ameliorate. By definition, of course, we believe the person with a stigma is not quite human. On this assumption we exercise varieties of discrimination, through which we effectively, if often unthinkingly, reduce his life chances (Goffman, 1963, p. 5).

Finally, Cohen (1972) stated quite directly his conclusion that there is a serious prejudice of a rather unique nature against people who are blind which results in damaging discrimination.

A number of controlled studies have been reported which lend empirical support to the opinions discussed above. Some of these studies have attempted to measure attitudes toward disabled people in general, while others have examined attitudes toward particular groups of stigmatized persons.

Several attempts to assess the attitudes toward disabled people in general have relied upon the Attitudes Toward Disabled Persons (ATDP) scale developed by Yuker and his associates (Yuker, Block, and Campbell, 1960; Yuker, Block, and Young, 1966). Work with the ATDP scale has led Yuker (1965) to conclude that, "In many respects prejudices toward the disabled are similar to prejudices toward other groups. Thus the person who is prejudiced toward the disabled will believe that all disabled persons are alike" (Yuker, 1965, p. 16). Further study by Chesler (1965) supported Yuker's conclusion with data which indicated that individuals who exhibit ethnocentric attitudes toward one particular minority group will express similar attitudes toward a variety of other "outgroups." Using both the Intergroup Relations Scale, the ATDP, and an N of 320, Chesler demonstrated significant positive correlations between the ATDP and four dimensions of



ethnocentrism, racial ( $r = -.45$ ), religious ( $r = -.40$ ), nationality ( $r = -.43$ ), and social class ( $r = -.46$ ).

Noonan, Barry, and Davis (1970) attempted to evaluate empirically five theoretical explanations of the problem of aversion toward the disabled. Authoritarianism was found to be the most relevant and valid predictor of negative attitudes toward the disabled and was also found to be unaffected by social desirability responses. Noonan, Barry, and Davis concluded that the disabled seem to be viewed as a minority group evoking negative response tendencies especially from those who are highly prejudiced as measured by the California F scale.

The ATDP, the Gough Felling Check List and the Social Distance Scale were the instruments used in a study reported by Siller (1963). Trends in this data indicated: (A) exclusion of the disabled from a high degree of personal intimacy is accounted for by the inferred dependency of the disabled, their inability to care for daily needs, and limits to the sharing of recreational activities more than by personal feelings of aversion; (B) specific experiences with the disabled are highly influential in conditioning of attitudes; (C) aversive reactions persist in spite of intellectual awareness of their defensive nature; (D) initial reactions are major stumbling blocks to successful interaction; (E) in continued relationships with the disabled there is frequent uncertainty about what is required in subsequent experiences; and (F) emotional attitudes toward the disabled are not unitary. This last realization has motivated much of the more recent work of Siller and his associates (Siller, Chipman, Ferguson, and Vann, 1967; Siller, Ferguson, Vann, and Holland, 1967; and Siller, 1970) which will be reviewed elsewhere in this paper. Finally, the research of Heider (1958) is relevant to the present topic. Using the concept of perceived similarities, Heider concluded that persons form positive associations with those



perceived to be similar in belief and properties and form negative responses to those perceived as dissimilar.

Other research studies which have led to the conclusion that deviant persons are the target of negative prejudices have utilized persons characterized by specific disabilities as the stimuli. In research on attitudes toward blind persons, Cowen, Underberg, and Verrillo (1958) demonstrated that antiminority group attitudes ( $r = .36$ ,  $n = 101$ ), anti-negro attitudes ( $r = .45$ ), and authoritarianism ( $r = .33$ ) were highly correlated with negative attitudes toward the blind. Handel (1960) and Himes (1960) similarly have indicated that attitudes toward the blind show evidence of stereotyping and aversiveness to social closeness. More recently, English (1971) presented data which indicated that negative attitudes toward blind persons are part of a broader personality dimension involving the stigmatization of nearly all persons who are physically deviant.

People who are mentally ill and former psychiatric patients also seem to elicit negative attitudes from other members of society. Nunnally (1961) referring to the mentally ill, stated, "The most important finding from our studies of public attitudes is that the stigma is very general, both across social groups and across attitude indicators" (Nunnally, 1961, p. 233). This conclusion supported a previous finding by Nunnally and Kittross (1958) which showed that the concept "Mental Patient" when evaluated using a semantic differential was rated definitely unfavorably on all scales. Philips (1963) indicated that negative reactions exist toward those who seek professional help for mental disorders. Sarbin and Mancuso (1970) reported data which indicated that the mental illness paradigm as a formula for understanding and controlling deviant conduct has not been widely accepted by the public. Although the central objective of the mental health movement has been to influence the general public to regard mental illness



with the same non-rejecting valuations as somatic illness, an analysis of social survey reports and other data presented by Sarbin and Mancuso points to the conclusion that the public tends to declare negative valuations on persons diagnosed as mentally ill. On the other hand, the data indicated that the public tends to be more tolerant of deviant conduct when it is not described with mental illness labels.

The mentally retarded have also been shown to elicit negative attitudes from people. Wang (1962) reported that the reactions of various groups toward the mentally retarded were found to be negative. A series of studies by Guskin (1962 A and B and 1963) pointed out that even though labeling seems to have no function and little use when clearcut observational evidence is available for making judgements, the label "mental retardation" leads to increasing judgements of subnormality when little observational evidence or ambiguous evidence is available.

Cowen, Bobgrove, Rockway, and Stevenson (1967) demonstrated significant correlations between an Anti-Deafness Scale and the Anti-Negro ( $r = .50$ ;  $n = 160$ ), Anti-Minority ( $r = .50$ ), and F Scales ( $r = .36$ ) derived from The Authoritarian Personality (Adorno, Frenkel-Brunswik, Levinson, and Sanford, 1950).

A study of attitudes among "caregiving" groups toward alcoholics utilized a semantic differential technique to examine the meaning associated with the concepts "alcoholic" and "alcoholism." Mackey (1969) reported that although there was an over-all trend for respondents to ascribe moderately desirable characteristics to concepts identified with normalcy, this trend was reversed in the ratings of concepts identified with alcoholism. The profiles of mean ratings showed that relatively undesirable characteristics were associated with alcoholics.

A number of studies have examined the reactions to different types





of deviant persons within the same study. Badt (1957) studied the attitudes of University students toward the provision of special education services and toward exceptional children themselves. In the first part, students seemed to agree that special services were needed, but they themselves did not want to get involved. While non-education students were openly hostile toward mentally handicapped and socio-emotionally maladjusted children, the education students also harbored distinctly unfavorable stereotypes and wishes for the segregation of these children. A study by Semmel and Dickson (1966) investigated the connotative reactions to these labels: normal white, normal Negro, stutterer, deaf, blind, epileptic, mentally retarded, and cerebral palsied. The reactions to these labels along a 3-point comfort-discomfort continuum indicated that all of the labels were rated significantly different from the normal white label. In addition, significant differences in reaction to the labels were related to the closeness of the social situation depicted in the various contexts; and the connotative reactions were demonstrated to be independent of professional training. Semmel and Dickson also indicated that the Connotative Reaction Inventory scores in response to the deviant labels correlated significantly ( $r = .20$ ;  $n = 457$ ) with a general measure of prejudice toward minority groups using the MMPI Pr Scale. An examination of the attitudes of employers toward disabled applicants utilized the following labels: epileptic, discharged from prison, deaf, discharged from a mental institution, confined to a wheelchair, discharged from a tuberculosis sanatorium, and no physical defect. Rickard, Triandis, and Patterson (1963) produced evidence to support the hypothesis that employers are prejudiced toward disabled applicants. Disabled applicants were rejected more strongly than non-disabled applicants. The strength of the prejudice varied among the disabilities, with employers being most prejudiced toward the epileptic and



persons discharged from prison and least prejudiced toward the person discharged from a tuberculosis sanatorium.

b. Neutral attitudes

In spite of the quantity of studies suggesting that a negative stereotype exists in regards to stigmatized persons, a number of other studies discovered no evidence of any such bias. Koehler (1933, cited in Barker et al., 1953) explored the attitudes of university instructors toward blind students and found no indication of any type of prejudice or differential attitude toward the blind. Likewise Rusalem (1950) investigated public attitudes toward the blind by means of a questionnaire responded to by graduate students. The reported perceptions of the subjects were not disparaging to the blind and did not support the existence of negative attitudes toward the blind. Jaffe (1967) contributed additional support for the contention that disability may not necessarily produce negative evaluations. This support comes from the finding that the non-disabled sketch person utilized in Jaffe's study was not evaluated significantly more favorably than either the mentally retarded person or the former mental patient. Furthermore, the person having a leg amputation was evaluated significantly more favorably than all of the other three. Finally, a series of studies (Lukoff and Whiteman, 1961; Whiteman and Lukoff, 1964 A and B; 1965) which examined attitudes toward blindness and toward blind persons failed to support the existence of a negative stereotype of the blind. Lukoff (1972) summarized these findings by stating, "Contrary to much of the literature, people's attitudes are not crystallized around a congerly of negative images of blind people; although this may be true for some portion of people, and even in some selected environments" (Lukoff, 1972, p. 7).

CONTENTS

ORIGINAL ARTICLES	1
REPORTS	1
EDITORIALS	1
DEPARTMENTS	1
SYMPOSIUM	1
CLINICAL REPORTS	1
LABORATORY REPORTS	1
PHARMACOLOGY	1
PHYSIOLOGY	1
PATHOLOGY	1
ANATOMY	1
HYGIENE	1
LEGAL MEDICINE	1
OBSTETRICS	1
PEDIATRICS	1
DERMATOLOGY	1
OPHTHALMOLOGY	1
OTOLOGY	1
UROLOGY	1
GYNECOLOGY	1
NEUROLOGY	1
PSYCHIATRY	1
GENERAL PRACTICE	1
QUESTIONS AND ANSWERS	1
NOTES	1
REVIEW	1
INDEX	1

### c. Positive attitudes

Furthermore, a number of studies can be cited which indicated that the presence of a disability in a stimulus person gave rise to positive attitudes toward the disabled person. Mussen and Barker (1944) reported that the publicly expressed, verbalized attitudes of university students tended to be favorable toward cripples. Similarly, Strong (1931) indicated that mildly favorable attitudes were verbalized toward cripples and toward the blind, while a more unfavorable attitude was expressed toward deaf-mutes. Some of the favorable attitudes toward disabled persons were examined in detail by Wright (1960) under the heading of the "salutory" aspects of disability. Some of these attitudes are expressed as an admiration for the coping of the disabled individual, amazement at his accomplishments despite the handicap, respect for the inferred depth of understanding of life and self often not attained by others, and the attribution of superior powers to the disabled. Dow (1965), in a study of the reactions of disabled children and their parents to disability, reported that both parents and children, regardless of social class, gave indications of a uniformly positive, optimistic pattern of attitudes toward disability, even though some families were able to cope better than others on the behavioral level. Finally, a study by Golin (1970) also demonstrated that attitudes toward psychiatric and physical disabilities are not necessarily negative. Golin pointed out that, with the exception of one treatment condition, attitudes toward persons described as former mental patients or as physically disabled were equal to or in a more favorable direction than those toward the non-disabled person.

The only conclusions that can be drawn, at this point, relative to the existence of positive or negative attitudes toward deviant persons are that attitudes toward deviant persons probably involve complex component



parts and that the ability to measure such attitudes is in an early stage of development. Some of the variables which affect the measurement process will be discussed in detail in a later section of this presentation. At this point, however, there are additional points to consider relative to attitudes toward stigmatized persons.

d. Discrepancies between verbal attitudes and overt behavior

There exists in the literature an indication that a discrepancy exists between verbally expressed attitudes toward stigmatized persons and overt behavior toward such persons. Barker, Wright, Meyerson, and Gonick (1953) summarized their observations by stating that even though public, verbalized attitudes toward disabled persons are on the average mildly favorable, indirect evidence suggests that deeper un verbalized attitudes are more frequently hostile. One explanation of this discrepancy is suggested to be the effect of "social desirability" on attitude measurement. Goldstein (1960) and Taylor (1961) demonstrated that some attitude scales to some extent measure a willingness to describe oneself in socially undesirable terms. The effect of "social desirability" on expression of attitudes toward the disabled was examined by Feinberg (1967). The conclusions of this study were that subjects with high social desirability needs responded with significantly more positive attitudes toward disabled persons (as measured by the ATDP) especially under high evaluative conditions. Noonan, Barry, and Davis (1970) suggested that their conclusions that the California F Scale best predicts non-disabled individuals' attitudes toward the visibly disabled might be merely a reflection of the adequacy of the other instruments used in the study. Several of the measures used were shown to be influenced by subjects' tendencies to respond in a socially desirable manner.





Four studies reported by Jones and Sigall (1971) attempted to bypass the biases that obscure paper-and-pencil attitude measures by convincing subjects that a physiological monitoring device was able to measure both the amplitude and direction of emotional responses. Jones and Sigall concluded that subjects' subsequent attempts to predict what the machine says about their attitudes are uncontaminated by response bias. An implementation of this technique, which was labeled "the bogus pipeline," was reported by Sigall and Page (1971) in a study of stereotypes. In an evaluation of the concepts "Americans" and "Negroes" the results supported the expectation that the stereotype ascribed to Negroes would be more favorable under the rating than under the "bogus pipeline" conditions. Americans were more favorably stereotyped under "bogus pipeline" than under rating conditions. A study by Wolfgang and Wolfgang (1968) attempted to measure attitudes by means of a non-verbal social distance test. For this test, each subject had to draw a figure representing himself in relation to symbols representing five different handicaps. The distance between the figure drawn and the symbol was taken as a measure of the social distance from the handicapped at which the subject felt most comfortable. Wolfgang and Wolfgang reported that a discrepancy was apparent in the verbal reactions and the spatial patternings of subjects toward the handicapped. The handicap of the object was very significant in the spacing of the subject's figure in relationship to the object figure, yet verbal attitudes did not clearly reflect this. Four times as many statements of sympathy and offers of help appeared in the verbal reactions, than did those of discomfort and embarrassment. This discrepancy indicated to the investigators that spatial positioning responses may be more immune to manipulation than verbal responses.

A possible explanation of the discrepancy between verbal attitudes



and overt behavior manifested toward stigmatized persons was suggested in a study by Winkler (1931, cited in Barker et al., 1953). Winkler proposed that because of the unusual postures and movements of the crippled, there is little possibility that physically normal individuals can establish an empathic relationship with them. For this reason, Winkler stated, the crippled person serves as a strange, disturbing emotional stimulus, and the behavior aroused is that of suspicion and aversion. To test this hypothesis, Winkler displayed action pictures of healthy and crippled children to 200 physically normal subjects who were to judge them with respect to character and personality traits. No reference was made to the fact that pictures of both crippled and normal children were included. As a consequence, some of the crippled children were not consciously recognized by the judges as being crippled. Unfavorable judgements of pictures of normal children constituted 46% of all judgements, while 60% of the judgements of pictures of crippled children who were not recognized as crippled were unfavorable. The explanation was offered that the postures of the crippled children, although not sufficiently peculiar to be consciously recognized as crippled, served as a stimulus for an unconscious negative reaction.

e. Differential treatment of the stigmatized

A number of studies have investigated the interactions between stigmatized and non-stigmatized persons in controlled situations. Farina and Ring (1965) investigated the influence of perceived mental illness on two measures of interpersonal attraction. The results indicated that perceiving a co-worker as mentally ill was associated with better task performance, possibly, as the investigators explained, because of the greater threat posed by a successful peer in comparison to that posed by a person believed



to be maladjusted and inadequate. It was also found that when a co-worker is viewed as mentally ill, subjects prefer to work alone rather than with him and blame him for inaccurately perceived inadequacies in the joint performance. A related study by Farina, Holland, and Ring (1966) examined the combined effects of perceived mental illness and the extent to which a person was held responsible for the stigma on the amount of pain inflicted upon him and how favorably he is evaluated. The data of this study revealed that the individual perceived as abnormal either because of mental illness or a poor childhood experience was treated in a harsher manner than the normal person. The abnormal individual was also described as less adequate in his performance, although there was no objective basis for this, he was less liked, and subjects preferred no further interaction with him.

Another series of studies investigated the effects of physical deviance on face-to-face interaction. Kleck, Ono, and Hastorf (1966) reported two studies which employed an interview-like situation, in which a confederate of the experimenters served as either a physically disabled or a physically normal person. The results indicated that subjects interacting with the physically disabled stimulus person: (A) tended to demonstrate less variability in their behavior as a group than did subjects interacting with a physically normal stimulus person, (B) terminated the interaction sooner than did subjects in the non-disabled interaction, (C) expressed opinions which were less representative of their actual beliefs than were those expressed by subjects in the non-disabled group. Another series of studies was reported by Kleck (1968, cited in Bartel and Guskin, 1971), which examined reactions to a person with a simulated leg amputation. In one investigation in which the amputee was an interviewer, it was found that subjects manifested greater physiological arousal, as



measured by the Galvanic Skin Response, when interacting with the amputee than when interacting with a non-disabled interviewer. In addition, shorter answers were given to questions from the amputee than from the non-disabled; and the person interviewed expressed more frequent conformity to the interviewer's beliefs when the interviewer was an amputee. In a second study, Kleck filmed the behavior of the subject being interviewed and had him rate the interviewer. Kleck found more favorable impressions of the disabled interviewer than the non-disabled, less movement in the presence of the disabled, and less variation in focus of visual attention when being interviewed by the amputee. Again the findings implied less freedom or more tension when interacting with the disabled. In the third study by Kleck, a non-disabled subject was asked to train two other persons in origami. One of the two persons was the simulated "amputee." Kleck discovered that the average interaction distance was less when the subject was training the non-disabled person as opposed to the disabled person. Disabled learners were rated as more interested and motivated in the learning task. As in the two previous studies, verbal statements by the non-disabled seemed to be biased in favor of the disabled, but non-verbal measures suggested less comfort with the disabled. The third study also contributed the suggestive finding that some of the differences wear off after a period of time.

Finally, a series of studies were carried out by Freedman and Doob (1968) which examined the effect of the experimental manipulations of deviancy on affiliation, aggression, and social influence. The subjects took "personality" tests and results were manipulated to indicate whether subjects were like or unlike the majority of the group, and the reactions of both deviants and non-deviants were analyzed. Results from the studies of aggression indicated: (A) given the opportunity to aggress against a previously chosen individual, deviants hurt a deviant who was similar to





themselves less than they did a non-deviant or a different deviant, but the non-deviant does not hurt the deviant more than he does the non-deviant; but (B) when asked to choose someone to receive electric shock, there were large differences between deviants and non-deviants. The deviants selected non-deviants more than deviants; whereas non-deviants had the opposite preference. In contrast, when the choice was for someone to receive a reward, the previous choices were reversed, with deviants picking other deviants and non-deviants picking other non-deviants.

In summary, conclusions about the existence of differential attitudes toward stigmatized persons are confounded by the conflicting results provided by the various attempts to measure verbally expressed attitudes. However, the evidence from behavioral studies of the interaction between disabled and non-disabled persons points to the fact that a problem does exist. Very little research has been done at this time to investigate the interaction between measurements of verbally expressed attitudes and controlled measurements of overt behavior toward stigmatized persons.

## 2. The Attitudes of Rehabilitation Personnel Toward Stigmatized Persons

### a. Indications of differential attitudes

Several writers have referred to the attitudes of rehabilitation personnel toward stigmatized persons and have suggested that such attitudes are not always what might be expected. In summarizing studies of the attitudes of workers for the blind, Barker, Wright, Meyerson, and Gonick (1953) noted that the attitudes of workers for the blind are not noticeably different from the attitudes of the general public. In addition, Barker and his associates suggested that some of the behavior of professional people who work with the blind indicates a conflict in attitudes. On the one hand, workers for the blind urge that the blind should not be isolated or



considered a group apart from others but should be accepted and integrated into society. At the same time, however, workers for the blind justify special class legislation for the benefit of the blind on the ground that they are indeed a special group and not like other people; and they vigorously promote the cause with appeals to pity and other emotions that devalue the blind. Scott (1965) stated that his studies did not reveal any evidence to indicate that the situation described by Barker had changed appreciably in twenty years time. Scott (1969) further developed his conclusions by pointing out that blindness is a learned social role and that agencies for the blind consciously and unconsciously promote dependency and perpetuate the stereotypes.

Gellman (1959) discussed the existence of prejudice against handicapped groups and pointed out that prejudice also exists in rehabilitation agencies and programs. Gellman stated that professional attitudes must be changed to reflect empathy rather than sympathy, respect rather than tolerance, and acceptance rather than pity. DuBrow (1965) suggested that rehabilitation personnel communicate negative attitudes toward disabled people by: (A) use of the label "compensationitis" in connection with a client who did not respond as expected, (B) termination of cases because of "lack of motivation" on the part of the reluctant recipient of service, and (C) use of the labels "CP," "MS," "MD," or "CVA," to refer to a disabled person. Kagan (1964) has observed that counselors have a tendency to encapsulate themselves by stereotyping members of a sub-culture in terms of the modal characteristics of that sub-culture which have been identified by sociologists. Finally, Lukoff (1972) made the point that the blind person's opinion of himself and his blindness is not affected so much by the diffused attitudes of the general public as by a much closer set of relationships. "The organizations and institutions where



he is educated and given rehabilitation are the bulwark in shaping how he formulates for himself his notions on the kind of person he is and will become." (Lukoff, 1972, p. 11). The statements of Lukoff and the others point to the necessity for investigating the attitudes of rehabilitation personnel toward stigmatized persons.

A study by Bell (1962) used the Attitudes Toward Disabled Persons Scale (ATDP) to assess the attitudes of rehabilitation workers toward the physically disabled. The results revealed no significant differences between the means for the group of rehabilitation workers when compared to other hospital employees not associated with the disabled. Bell suggested that these results reflected inadequacies in the ATDP more than anything else. He felt that the relationship between feeling that the disabled are "different" and successful functioning as a therapist is curvilinear. Regarding the disabled as completely different or no different are both unrealistic positions and will inhibit effectiveness. Siller and Chipman (1964) supported Bell's finding that there was no relationship between scores on the ATDP and years of professional experience as a rehabilitation worker. Again these findings were interpreted to relate more to the adequacy of the measuring instrument than to the attitudes of the rehabilitation workers.

One of the studies by Whiteman and Lukoff (1964) analyzed the different attitudes toward blindness and blind people of social work students and non-social work students. No significant differences between the groups was discovered for three of the aspects of attitudes: (A) general orientation to blindness, (B) public policy toward blind people, and (C) readiness for interaction with blind people. There was a difference between the groups related to (D) perceived attributes of blind people. Social work students showed greater denial that blind people possessed

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE

unique qualities while at the same time attributing greater unhappiness to the blind. Also the quality of the interaction was different, with social work students displaying a less protective orientation, either at the interpersonal or at the public policy level.

Several studies have examined the attitudes of students and rehabilitation personnel toward psychiatric patients. Canter (1963), using student nurses as subjects, discovered a moderate, negative relationship ( $r = -.36$ ;  $n = 122$ ) between authoritarianism and effectiveness of work with patients. However, negative attitudes toward psychiatric patients were not associated with poorer work with patients ( $r = -.03$ ). Canter concluded that negative attitudes toward patients as measured in this study were superficial stereotyped responses which could be altered by experience, but that authoritarianism is a more stable personality variable which can affect the effectiveness of work with mental patients. Kurtz, Kurtz, and Hoffnang (1970) reported a study which demonstrated that authoritarianism was also influential in judgements of clinicians about lower-class patients. Lower-class case histories were judged significantly more negatively by psychiatric residents who were more authoritarian. Similar results bordered on significance for social work students. A study to determine the differential effects of diagnostic labels versus severity of illness on vocational, social, and psychiatric judgements of ex-mental patients yielded some unexpected results. Loeb, Wolf, Rosen, and Rutman (1968) compared the judgements of a group of businessmen-professionals with those of a group of rehabilitation counselors. The results showed no differences in the judgements made by the two groups with the exception that rehabilitation counselors were less optimistic about the applicant's chance of making lasting friendships.





The study by Mackey (1969), which compared the attitudes of caregiving and mental health groups toward alcoholics, identified differences in the patterns of ratings. The alcoholic was viewed with more passivity and impotence by mental health professionals, and with greater mystery and strangeness by police officers and guidance counselors. As Mackey observed, "The danger is not that people have these views, which may have some basis in reality, but that these views become entrenched into their value systems and get reflected as disabling stereotypes" (Mackey, 1969, p. 670).

#### b. Consequences of differential attitudes

A number of studies have attempted to demonstrate the consequences of certain attitudes and prejudices in a psychiatric setting. Canter (1963) showed that the effectiveness of work with mental patients was affected by authoritarianism but not by the more superficial attitudes toward mental patients. Cohen and Struening (1964) used data from the "Opinions about Mental Illness" questionnaire administered to hospital personnel to develop hospital social atmosphere profiles for 12 VA hospitals. These profiles were compared to the mean number of in-community days registered by patients during the 6 and 12 month period following admission as a criterion of hospital effectiveness. It was found that a hospital atmosphere characterized by authoritarian-restrictiveness was negatively related to in-community days and that other hospital types were positively related to the criterion of effectiveness. Ellsworth (1965) had psychiatric patients rate the behaviors of their ward staff and compared these ratings to attitudes endorsed by the staff members themselves. The data revealed three clusters of attitudes which had definite behavioral correlates. Restrictive attitudes were consistently related to controlling and restricting behavior ( $n = 65$ ;  $r$ 's = .32 to .47). A second cluster of attitudes, labeled "Protective Benevolence,"



was related to seemingly incongruent behaviors, such as aloofness, distance, and dishonesty ( $r$ 's = .33; to .45). Ellsworth explained this apparent contradiction by pointing out that staff members who were characterized by the Protective Benevolence dimension tended not to confront or upset the patient, but to accept him as he is and tell him what he wants to hear. The third cluster of attitudes was highly related ( $r$ 's = .33 to .68) to outgoing interpersonal behavior and was labeled "nontraditionalism." The "nontraditional" staff person seemed to believe that the patient is not the passive victim of circumstances beyond his control, but that he is able to change, and that interaction with him pays off. If a staff member endorsed non-traditionalism, he tended to endorse neither restrictive control nor protective benevolence. The data from this study supports the concept of an attitude as an underlying disposition which enters into the determination of a variety of behaviors.

Two significant studies did not assess the attitudes of rehabilitation personnel directly, but inferred the existence of attitudes from an analysis of patterns of behavior and decisions made in rehabilitation settings. Williams (1969) investigated the possibility that client selection for special vocational rehabilitation-public assistance (VRPA) projects is influenced (A) by the middle class biases of rehabilitation counselors which would result in less marginal clients being accepted, (B) by the type of disability, which would result in those clients with disabilities which could be quickly and efficiently treated being accepted more frequently, and (C) by the orientation of the agency, which also modifies the attitudes and operational procedures of the professionals involved. Williams looked at the differential selection of both whites and non-whites in the New Jersey and Florida VRPA projects to determine



whether the accepted groups could be viewed as random samples of the referred clients. The results indicated that, in Florida, the counselors were more likely to accept those white clients who were younger, married, of higher occupational status, and/or had greater educational attainment, and age was the single most important variable. Also in Florida, the accepted non-whites were more marginal than whites. For white clients in New Jersey, age was the only significant indicator of acceptance into the program. For non-whites, education was a significant indicator as well as age--those with more education having a better chance for acceptance. Williams reported other findings which suggested that certain biases were also at work in determining the ultimate disposition of the various cases.

Finally, a study by Schofield and Kunce (1971) seems most relevant to the present investigation. The purpose of the Schofield and Kunce study was to investigate the nature of counselor perceptions and counselor treatment of handicapped clients of a large metropolitan vocational service. The specific questions asked were: (A) Will a specific disability be perceived differently by different counselors? and (B) Will a specific counselor perceive various kinds of disabilities in different ways? The study examined four variables in the interaction of six counselors with a total of 619 clients. The variables were: (A) counselor evaluation of workshop performance, (B) counselor evaluation of client employability, (C) counselor-client interaction based on rate of client drop-out; and (D) counselor-client interaction based on recommendations for subsequent work adjustment programs for clients. Physically disabled, mentally retarded and emotionally disturbed clients were evaluated in the study. Results indicated significant differences beyond the .001 level for the three groups of clients in regard to workshop ratings, employability ratings,



and referral to work adjustment programs. Further examination of the data led to the inferences that: (A) various perceptual styles and stereotypes exist; (B) counselor perceptions may be as descriptive of the counselor as they are of the client; and (C) perceptions may influence counselor-client interactions. The ratings of some counselors revealed definite stereotypes toward certain disability types, while others indicated an optimism-pessimism style, and still others indicated a tendency to restrict their ratings to a limited number of the categories mentioned. From the data available, the investigators were able to develop "thumbnail sketches" of the counselors. These sketches were shared with other agency personnel who were able to identify the counselors by name from the descriptions provided from their rating styles. It was also apparent from the study that counselor perceptions and behaviors are influential in what happens to a client, and that such actions may not necessarily be related to the actual needs of the client. Schofield and Kunce concluded that it should be helpful for counselors to become aware of their own biases and stereotypes so that they do not automatically impute behaviors to clients that may not represent the actual situation.

#### c. Impact of professional training

At this point literature will be reviewed which relates to the impact of professional training on the attitudes toward stigmatized persons. Kelly, Hastorf, Jones, Thibaut, and Usdane (1960) suggested that many of the individuals entering graduate programs in occupational therapy, rehabilitation counseling, and the like, while vitally interested in working with the handicapped, appear initially to possess some of the same attitudes, concerns, and biases about the handicapped as does the population at large. Joslin (1965) conducted a study which found no significant correlation ( $n=39$ ;





$r = .28$ ) between measures of knowledge and counselor competence and which undermined assumptions that course work leads to competence. Joslin concluded that emotional and attitudinal factors must be given greater consideration in the preparation of counselors. However, Patterson (1962) discouraged selection of counselor candidates in terms of interests, attitudes, and personality on the grounds that knowledge of these characteristics is insufficient at this time. Patterson suggested that these aspects of the counselor should be the concern of the supervisor in an intensive counseling practicum. Kagan (1964) was skeptical that the classroom sessions and field experiences provided in counselor education programs are likely to alter deep-rooted attitudes and beliefs on the part of the student counselor.

Very few studies have been done to assess the impact of training on attitudes toward stigmatized persons. Anthony (1968) was primarily interested in measuring the effectiveness of rehabilitation counselor training on the ability to communicate facilitative conditions, but he also included in his study an assessment of students' attitudes toward disabled persons using the ATDP. When compared to a control group of philosophy students, rehabilitation counseling students on the first level of training were equivalent to the control group on all measures. However, fourth level rehabilitation counseling students scored significantly higher than fourth level philosophy students on the ATDP, indicating that rehabilitation counseling training does make a difference on the dimensions measured. Ferneau and Gertler (1971) studied the effect of the first year of psychiatry residency on attitudes toward alcoholism. At the end of one year the residents still tended to believe that alcoholism is a character defect, but they were more likely than at first to believe that alcoholics can control their drinking and that alcoholism is an illness. The effect of



one year of psychiatry residence was to increase the ambivalence toward alcoholism and alcoholics of the residents studied.

The information presented in this review indicates that the attitudes of rehabilitation personnel seem to have an impact on the rehabilitation process. At this time, however, little is known about the true direction or intensity of these attitudes, the exact nature of their effect on the process, or their susceptibility to change as a result of professional training.

### 3. The Measurement of Attitudes

#### a. Definitions and dimensions of attitudes

The attitude concept has been described by Allport (1954) as "the primary building stone in the edifice of social psychology" (Allport, 1954, p. 45), and the extensive attitude literature of the past twenty years supports his claim. In spite of the centrality of this concept, or perhaps because of it, there is still no consensual definition of attitude. Most definitions of attitude reflect one of two conceptualizations. Allport (1935) defined attitude in this way; "An attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport, 1935, p. 810). This definition reflects the position that attitude is a hypothetical construct which is presumed to actually exist, even though it is not directly observable or measurable. An attitude is considered to be a more or less stable characteristic which can be detected from various behaviors. The second major conceptualization defines attitude in terms of the probability of the occurrence of a specified behavior in a specified situation (Fuson, 1942; Campbell, 1950). The primary difference between these two conceptualizations



was stated by DeFleur and Westie (1963) as the kinds of inferences which their proponents would derive from the observable attitudinal responses. DeFleur and Westie went on to say that the primary inference implied in probability conceptions is that attitudinal responses are more or less consistent. A series of responses toward a given attitudinal stimulus is likely to show some degree of organization, structure, or predictability. The attitude, then, is an inferred property of the responses, namely their consistency. In this formulation, attitude is equated with the probability of recurrence of behavior forms of a given type or direction.

The first definition, the latent process conceptualization, involves the assumption of attitude-behavior consistency, since both verbal and overt behavioral responses are mediated by the same underlying, latent variable (attitude). DeFleur and Westie point out that the assumption of attitude-behavior consistency is avoided in the probability conceptualization of attitude since each kind of behavior "can be regarded as equally legitimate and the probability of each occurring under various circumstances, or their possible correlation, becomes an empirical problem" (DeFleur and Westie, 1963, p. 26). A third conceptualization of attitude which relates to both the latent process and the probability notions was proposed by Campbell (1963). He suggested that the same latent acquired behavioral disposition or attitude mediates both verbal and overt behavioral responses, but that the way the attitude is manifested depends upon certain situational pressures. Although Campbell views attitudes as latent predispositions, he apparently sees the task of specifying situational thresholds (which determine the degree of consistency of verbal and overt behavioral response) as an empirical problem.



Scott (1968) made the point that the construct attitude has become so complex that one can no longer talk simply about "measuring an attitude." It is necessary to restrict oneself to procedures for measuring a particular property of an attitude. Scott identified eleven dimensions or defining properties of attitudes as: (1) direction, (2) magnitude, (3) intensity, (4) ambivalence, (5) salience, (6) affective salience, (7) cognitive complexity, (8) overtness, (9) embeddedness, (10) flexibility, and (11) consciousness. According to Scott, "Most effort at measurement to date has been directed toward assessing the properties of direction and affective magnitude" (Scott, 1968, p. 265). Direction, is defined by Scott, as a favorable or unfavorable component of attitude representing, on the one hand, positive feelings, appraisals, and tendencies to approach or support the object and, on the other hand, negative feelings, appraisals and tendencies to avoid or harm the object. The magnitude or extremity of an attitude refers to its degree of favorableness or unfavorableness.

#### b. Types and characteristics of measuring instruments

The present format for reviewing the types of instruments used for the assessment of attitudes draws heavily from the work of Cook and Sellitz (1964), who examined broad classes of measurement techniques from the point of view of the kinds of evidence they provide and the nature of the inferences involved in estimating attitude. Cook and Sellitz systematically examined the grounds for believing that a given response is indicative of a positive or a negative disposition toward an object. Accordingly, this discussion will focus on five groupings of techniques: (A) measures in which the material for inferences consists of self-reports of beliefs, feelings, or behavior toward an object or class of objects; (B) measures in which inferences are drawn from observed overt behavior toward the



1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is essential for ensuring transparency and accountability in the organization's operations.

2. The second part outlines the various methods and tools used to collect and analyze data. It mentions the use of surveys, interviews, and focus groups to gather information from stakeholders. Additionally, it discusses the application of statistical software to process and interpret the collected data.

3. The third part describes the results of the data analysis. It highlights the key findings and trends identified, such as the increasing demand for certain services and the need for improved communication channels. It also notes any challenges encountered during the analysis process.

4. The fourth part provides recommendations based on the findings. It suggests implementing specific measures to address the identified issues, such as enhancing training programs and improving the efficiency of internal processes. It also recommends regular monitoring and evaluation to ensure the effectiveness of these measures.

5. The final part of the document concludes with a summary of the overall findings and a statement of the organization's commitment to continuous improvement and transparency.



object; (C) measures in which inferences are drawn from the individual's reactions to or interpretations of partially structured material relevant to the object; (D) measures in which inferences are drawn from performance on objective tasks where functioning may be influenced by disposition toward the object; and (E) measures in which inferences are drawn from physiological reactions to the object. Since attitude measurements can be influenced by other variables in addition to the individual's disposition to the object, the discussion will include a brief consideration of these other variables. The additional variables are: (A) other characteristics of the individual, such as his dispositions toward other objects presented in the situation, values he holds that are engaged by the situation, his motivational state, his expressive style, and so on; (B) other characteristics of the situation, including its prescriptions as to appropriate behavior, the expectations of others in the situation with respect to the individual's behavior, the consequences of various acts on his part, and so on. These variables may in turn influence the probability that overt responses may deviate from "private" responses. Therefore, it is important to consider the extent to which an attitude measure is susceptible to this type of distortion. According to Cook and Sellitz (1964), "Susceptibility of overt responses to distortion would seem to be a function of three characteristics of the instrument; the extent to which its purpose is apparent, the extent to which the implications of specific responses are clear, and the extent to which responses are subject to conscious control" (Cook and Sellitz, 1964, p. 39). In reviewing the types of attitude measuring instruments, mention will be made of the effects of characteristics of the subject, the situation, or the instrument on the inferences that can be made about attitudes.



### 1. Self-report questionnaires

The most frequently used technique for assessing attitudes has been the self-report questionnaire. A number of scales have been developed which differs in method of construction, method of response, and basis for interpreting scores. Sellitz, Johoda, Deutsch, and Cook (1959) have identified three types of scales as: differential scales, summated scales, and cumulative scales. In differential scales, the items form a gradation of such a nature that the individual agrees with only one or two, which correspond to his position on the dimension being measured, and disagrees with statements on either side of those he has selected. Differential scales were originally proposed and developed by Thurstone (1928) as a method of approximating interval scales. Thurstone scales constitute reasonably satisfactory ordinal scales; and provide a basis for saying that one individual is more or less favorable than another.

A summated scale also consists of a series of items with which the subject is asked to express his agreement or disagreement. Each response is given a numerical score indicating its favorableness or unfavorableness, and the algebraic summation of the responses results in the total score. The total score is interpreted as representing an individual's position on a scale of favorable-unfavorable attitude toward the object. The type of summated scale most frequently used in the study of social attitudes follows a pattern devised by Likert (1932). In a Likert-type scale the subjects are asked to respond to each item in terms of several degrees of agreement or disagreement; for example, (1) strongly approve, (2) approve, (3) undecided, (4) disapprove, (5) strongly disapprove. The Likert-type scale enables subjects to be ranked in terms of favorableness of attitude but it does not provide a basis for saying how much more favorable one subject



is than another, nor for measuring the amount of change after some experience.

Cumulative scales are also made up of a series of items with which the subject indicates agreement or disagreement. However, in a cumulative scale the items are related to one another in such a way that, ideally, an individual who replies favorably to item 2 also replies favorably to item 1; one who replies favorable to item 3 also replies favorably to items 1 and 2; and so on throughout the scale. An example of a cumulative scale was the Bogardus social-distance scale (Bogardus, 1925). This scale contained seven items which Bogardus believed to denote seven degrees of permitted closeness. The items were: (1) to close kinship by marriage, (2) to my club as personal chums, (3) to my street as neighbors, (4) to employment in my occupation in my country, (5) to citizenship in my country, (6) as visitors only to my country, (7) would exclude from my country. Bogardus used this scale to assess attitudes toward various ethnic groups.

The final self-report questionnaire to be considered is the semantic differential which was developed by Osgood, Suci, and Tannenbaum (1957). The semantic differential was originally used by Osgood and his associates in their attempts to "measure meaning," but the technique has since been applied and found useful in a wide range of research areas (Snider and Osgood, 1969), including the measurement of attitudes. A semantic differential type rating scale consists of a set of bipolar scales which are anchored at each end by an adjective describing one side of a semantic continuum, (e. g., valuable-worthless, fast-slow, large-small, etc.). Usually a subject is asked to rate a concept on each scale by placing a check mark on the continuum which is divided into a seven-point space. The original factor analyses of sets of adjectives done by Osgood and his associates



(1957) revealed three major factors or dimensions in semantic space. These dimensions are evaluation, potency, and activity. Most attitude research using the semantic differential has been restricted to assessments of the evaluative dimension, although there have been occasional uses of the potency and activity dimensions especially in the study of attitudes toward groups, institutions, and social movements (Diab, 1967, and Nunnally, 1961). The advantages of the semantic differential include the easy assembly and scoring and the finer gradations of evaluation that are permitted. Among the disadvantages are the fact that one set of bipolar adjectives suitable for one concept may not mean the same thing for other concepts. In addition, there is no reason to think that the seven gradations on the scale represent equal units. Finally the responses made to scales representing the evaluative dimension would seem to be easily influenced by a socially desirable response set (Ford and Meisels, 1965).

The inferences drawn from self-report instruments are based on the assumption that the relationship between attitude and expression is a direct one and that the attitude corresponds to the manifest, common-sense implications of the stated belief or feeling. However, self-report measures have a number of characteristics that make them susceptible to distortion of overt responses. The purpose of the instrument is obvious to the respondent; the implications of his answers are apparent to him; he can consciously control his responses. Self-report measures can be influenced by "social desirability" distortions (Taylor, 1961; Goldstein, 1960) and by response sets or expressive styles unrelated to attitude (Cook and Sellitz, 1964).

Efforts to counteract the eliciting of socially desirable responses include making the purpose of the instrument less apparent by the inclusion of items not relevant to the intended attitudinal object, or by including







in each item a number of aspects in addition to the one being investigated. These approaches serve to make the purpose less obvious, but they do not conceal it entirely. Other methods to allow subjects to make responses that may be undesirable are the assurance of anonymity, emphasis on the importance of honest answers in order to contribute to scientific knowledge or some other desirable outcome, or establishing rapport between the examiner and the subject to create the feeling that the examiner will not disapprove of whatever views may be expressed. Social desirability responses may also be combatted by the use of forced-choice tests, where the respondent is asked to indicate which of two statements, matched in level of social desirability but differing in implications for attitude, is closer to his own view.

Efforts to neutralize different response sets, such as a tendency to agree or to avoid moderate or extreme responses, have included varying the wording of items in such a way that for approximately half of them agreement represents a favorable response to the attitudinal object, and for half an unfavorable response. In some instruments items may consist of open-ended questions that call for a free response. In dealing with extreme or moderate response sets an instrument may provide matched pairs of items, one referring to the attitudinal object, the other referring to some control object, and scoring in terms of the discrepancy between the two responses. The technique of comparing responses to the attitudinal objects and to control objects may also be used to eliminate extraneous influences which may result from subjects who may possess different information relevant to certain items or who may hold other values which might relate to certain aspects of some of the items.

Two final sources of extraneous variance on self-report instruments have been noted by Jones and Sigall (1971). These investigators refer first

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is essential for ensuring transparency and accountability in the organization's operations.

2. The second part outlines the various methods and tools used to collect and analyze data. It mentions the use of surveys, interviews, and focus groups to gather information from stakeholders. Additionally, it discusses the application of statistical analysis to interpret the collected data.

3. The third part describes the process of identifying key performance indicators (KPIs) and how they are used to measure the organization's progress. It highlights the need for regular monitoring and reporting on these indicators to ensure that the organization is on track to achieve its goals.

4. The fourth part focuses on the importance of communication and collaboration among all team members. It stresses that effective communication is crucial for sharing information, resolving conflicts, and making informed decisions. It also mentions the role of regular meetings and reports in keeping everyone updated on the organization's status.

5. The fifth part discusses the need for continuous improvement and innovation. It encourages the organization to regularly evaluate its processes and procedures to identify areas for improvement. It also mentions the importance of staying up-to-date with the latest trends and technologies in the industry to remain competitive.

6. The sixth part concludes the document by summarizing the key points discussed. It reiterates the importance of maintaining accurate records, using effective data collection methods, monitoring KPIs, communicating effectively, and pursuing continuous improvement. It ends with a statement of commitment to achieving the organization's mission and vision.

to errors associated with "thoughtlessness," which occur when the individual faces a multiple item questionnaire with no incentive to be particularly discerning and no penalty for casual sloppiness. In this situation it is too easy for the subject not to care about the validity of his answers. Jones and Sigall also discuss errors of "psychologic." This refers to a subject's tendency to rate other people according to how they "logically" should be rated according to the subject's own personality theory instead of the subject's inner feelings.

#### ii. Measures of overt behavior

To a certain extent, the development of other attitude measures was motivated by the inability of paper-and-pencil measures to control for the reactive responses of the subject. Campbell and Stanley (1963) have termed reactive those responses of a subject that are determined partially or wholly by the subject's knowledge that he is the object of study. Techniques which are aimed at assessing attitudes without destroying their natural form are regarded as indirect measures.

A number of measures have been suggested in which inferences about attitudes are drawn from observations of overt behavior. As with self-report measures, the assumption is made that there is a simple correspondence between the nature of the behavior and the nature of the underlying attitude. Cook and Sellitz (1964) indicated that behavioral measures generally take one of three forms: realistically contrived decisions which the subject believes will affect him, role-playing, and sociometric choices.

The behavioral measures differ in their susceptibility to distortion. To the extent that staged situations are accepted as genuine by the subjects, the purpose of the instrument may be disguised. However, even if the subject does not recognize the situation as a test of attitude, he may be aware



of the implications of his responses and he may still act in such a way so as to present himself as unprejudiced, if only to protect his self-image. Some aspects of the behavioral measures definitely reduce the probability of distorted responses to the extent that responses are seen as having real-life consequences. The anticipation of such consequences may counter-balance the wish to make a good impression. In role-playing the pressure for a quick response to unanticipated stimulus situations may operate to lessen conscious control of behavior.

Recently a number of behavioral measures which have originated in research associated with non-verbal communication have been applied to the assessment of attitudes. Argyle (1967) demonstrated that one determinant of how long individuals gaze at one another during conversations appears to be interpersonal attraction. The frequency of glances was found to correlate positively with an individual's liking for another, and to the extent to which he desires to initiate or maintain his interaction with the other. Similarly, Mehrabian (1968) conducted four experiments to explore the relationships between posture, orientation, and distance of a communicator to an addressee and the attitudes and status differences between a communicator and his addressee. In a decoding methodology, subjects inferred attitudes from photographed postures. In a methodology which involved encoding, subjects responded to situations which included liked-disliked, high-low status, and male-female addressees, while the posture, orientation, and distance of the subjects were recorded. Results of the experiments related the following set of variables to attitudes and status relationships between communicators: distance between communicators, eye contact, degree of relaxation in arms, legs, or total posture, degree of forward versus backward lean while seated, occurrence of armsakimbo position while standing, orientation of the body toward the addressee, arm openness, and head level versus lowered.



A third measure in this category closely resembles the two preceding behavioral measures even though it is ostensibly a verbal task. Wiener and Mehrabian (1968) have found that positive-negative communicator attitudes can be inferred directly from different classes of verbal communicator behaviors. This method is based upon the analysis of verbal expressions for the degree of "Immediacy" or "non-Immediacy" between a communicator and the object of communication. Communicator-object non-immediacy is a measure of the degree of attenuation of directness and intensity of interaction between the communicator and the object of communication. For example, although "you and I decide" is equivalent in meaning to "we decide" the former is considered more non-immediate than the latter. This is so, since in the first instance two symbols were used which maintain separation between the two entities, while the language provides the possibility of using only one symbol. Similarly, "We are looking at X" is categorized as less immediate than "I am looking at X," since the former involves a dilution of the communicator's interaction with "X." Again, "I dislike X's habits" is categorized as less immediate than "I dislike X," since the former restricts interaction to some aspect of "X." Wiener and Mehrabian have described nine categories of verbal expression which seem to be relevant to non-immediacy. The analysis of immediacy is grouped with behavioral measures rather than verbal measures since it is an implicit measure of attitude rather than an explicit.

To the extent that the behavioral measures which have developed from non-verbal communication research are able to be assessed during relatively unstructured situations, do not rely on deception for their validity, and are not considered to be under conscious control, they would seem to be least affected by response distortions. However, Cook and Sellitz (1964) make







the point that behavior in everyday life situations is not determined solely by attitude toward the attitudinal object. Social customs, other values, and other characteristics of the object individuals may predominate over the "target" aspects of those individuals in determining a subject's response to them.

### iii. Partially structured stimuli

Another group of attitude measures are those in which inferences are drawn from the subject's reaction to or interpretation of partially structured stimuli. The characteristic common to techniques in this category is that, while there may be no attempt to disguise the reference to the attitudinal object, the subject is not asked to state his own reactions directly. Ostensibly, the subject may be describing a scene, a character, or the behavior of a third person. The stimulus material is usually pictorial, but may be verbal. The basis for inferences about attitudes from these measures is that the perception of stimuli that are not clearly structured is influenced by the perceiver's own needs and dispositions. The development of these techniques is motivated by the assumption that, the disguising of the purposes of the instrument will lessen the probability of response distortion. Even if the subject is aware of the purpose of the test, it may be easier to express views that may be undesirable if one does not explicitly acknowledge them as his own. However, caution is necessary with such inferences since the responses an individual attributes to a hypothetical third person may be based either on his own response disposition or on his estimate of how most people would react in such a situation. Attempts to validate the conclusions of these measures have usually attempted to establish a relationship between estimates of attitudes based on partially structured stimuli and those based on self-reports. However,



since measures based on partially structured stimuli were to an extent developed to counteract the susceptibility of self-report forms to response distortion, this type of validation seems weak. Getzels (1951), cited in Cook and Sellitz (1964), approached this problem by predicting conditions under which speeded completions of third-person sentence stubs would differ from completions by the same respondents, of the same sentence stubs presented in the first person. Getzels predicted: (A) that first- and third-person responses would differ on items subject to strong social norms not fully internalized by all members of the group and would not differ on items not subject to such norms; and (B) that in the case of the former items, more socially acceptable answers would be given on the first-person form than on the third-person form. Both predictions were strongly supported. One serious disadvantage in using projective techniques for attitude assessment is that not all responses are clear-cut and the responses between the obvious extremes may be difficult to score.

#### iv. "Objective" tasks

Many attitude measures have been produced in which inferences are drawn from the subject's performance of ostensibly "objective" tasks. In this approach, the subject is presented with tasks which may be disguised as tests of information and ability, or simply as jobs to be done. The assumption is that performance on the task may be influenced by attitude, and that a systematic bias in performance reflects the influence of attitude. Some studies (Levine and Murphy, 1943; Jones and Kohler, 1958) have provided support for the assumption that a subject will be able to memorize more quickly and retain longer material which more closely resembles his own position on an issue. Another procedure involves an "information" test in which some items have no correct answers. The



alternatives provided as answers, however, indicate relatively favorable or unfavorable dispositions toward the attitude object, with the assumption being that the subject will choose the alternative which resembles his own attitudes. Support for this approach was provided by Hammond (1948), Weschler (1950), and Rankin and Campbell (1955). Similarly, tests of reasoning have been developed based on the same assumptions. Studies by Morgan (1945) and Thistlethwaite (1950) have supported the assumption that the direction of errors in tests of reasoning is influenced by attitudes.

Sherif and Hovland (1961) demonstrated that when a stimulus that differs greatly from objects being judged is used as a standard for comparison (anchor), the judgements of the objects shift systematically away from the anchor value (contrast effect). Conversely, an anchor stimulus near the value of the objects being judged produces systematic shifts in the opposite direction, toward the anchor (assimilation effect). The Own Categories Procedure asks a subject to sort the object statements into any number of piles he chooses, so that the objects in each pile belong together and the piles represent gradations of favorableness-unfavorableness toward the object. This procedure allows the assimilation-contrast effects to be manifested freely by using a large number of ambiguous or equivocal statements, and having the individual decide on the number of categories to use and how he will distribute judgements into them. The procedure yields two related numerical measures of the person's attitude and relative involvement in the issue: (1) number of categories used, and (2) widths of designated categories. These measures are significant since Sherif and Hovland have demonstrated that the more highly involved the person, the fewer the categories he uses to categorize a range of items from one extreme to the other; and the person with some involvement in the object domain distributes



his judgements bimodally, the largest mode indicating objectionable items and the smaller the most acceptable items. Support for this procedure was supplied by Reich and Sherif (1963), Glixman (1965), and LaFave and Sherif (1968).

In evaluating the inferences drawn from measures which utilize "objective" tasks, Cook and Sellitz point out that it seems reasonable that most subjects take them at face value and that they are relatively free of distortion attempts. It also seems reasonable to infer that an individual has a strong attitude toward an object if his performance shows a marked and consistent bias. The question is, how sensitive are such measures? Also, is it possible that individuals with equivalent attitudes differ in the extent to which their performance on such tasks is influenced by their attitudes? Another problem with measures of this type concerns the direction of the attitudes inferred. Responses may reflect either wishes or fears. For example, a person who underestimates the number of Negro doctors in the United States may do so on the basis of his feeling that Negroes do not have the ability to become doctors, or he may do so on the basis of his belief that opportunities for Negroes to obtain medical training are limited.

#### v. Physiological reactions

A fifth group of attitude measures are those in which inferences are based upon physiological reactions to the attitudinal object. Some of these measures have utilized the galvanic skin response (GSR), vascular constriction in the fingers, and pupil size as an indicator of attitude which is beyond conscious control. The subject's physiological responses are measured while he is in the presence of members of the object group or when he is exposed to pictorial representations of situations involving





members of the object group. The assumption is that the magnitude of the physiological reaction is directly and positively related to the extent of arousal of the intensity of feeling; therefore, the greater the physiological response, the stronger and/or more extreme the attitude is presumed to be. Support for this assumption is provided by Rankin and Campbell (1955) who assessed differential reactions to Negro and to white experimenters using the GSR. Westie and DeFleur (1959) have utilized GSR, vascular constriction of finger, amplitude and duration of heartbeat, and duration of heart cycle to examine the reactions of subjects who were viewing pictures of whites and Negroes in social situations. This study found that subjects who were considered prejudiced, based on their responses to a social distance questionnaire, showed greater GSR reactions but lowered pulse rates in response to slides depicting Negroes. Cooper (1959) also found that the GSR magnitude to ethnic names like "Mexicans," "Swedes," and "Japanese" could be predicted from verbal reactions to the same labels. Porier and Lott (1967) found a low ( $r = .38$ ,  $n = 60$ ) but significant correlation between GSR reactions to contact with a Negro and scores on an ethnocentrism scale.

The measures reported above, however, limit the inferences which can be drawn about attitudes. Most measure of physiological reactions give direct indications only of the extent of arousal; they do not reveal whether the corresponding emotion is pleasurable or unpleasurable. One possible exception to this limitation is the technique of photographing pupillary constriction and dilation which has been developed by Hess (Hess and Polt, 1960; Hess, 1965). These studies have shown that pupils constrict in response to unpleasant stimuli and dilate in response to pleasant stimuli. This difference provides a firmer base for inferences about the direction of attitude. The purpose of the physiological measures may or may not be



apparent to the subject, but even if the purpose is apparent, the responses are not subject to conscious control by the subject. However, Cook and Sellitz (1964) point out that the physiological responses may be sensitive to other aspects of the stimulus or the experimental situation than the one being investigated and that it is difficult to control the situation so completely that other factors are ruled out as possible determinants of the response.

#### vi. Bogus pipeline

A more recent procedure for assessing attitudes is the "bogus pipeline" technique which has been described by Jones and Sigall (1971). This technique basically involves a self-report but under conditions of deception which presumably lead to more "distortion-free" responses. In the bogus pipeline procedure, subjects are convinced that a physiological monitoring device is able to measure both the amplitude and direction of emotional responses. Then subjects are asked to predict what the machine will say about their attitudes. Assuming that the subjects do not want to be second-guessed by a machine, it is felt that the subject's subsequent reporting of his attitudes will not be contaminated by many of the biases that obscure paper-and-pencil measures. Jones and Sigall reported four experiments in which subjects were convinced of the validity of the bogus device and in which the ratings obtained under the bogus pipeline condition were significantly different from ratings obtained in a typical rating situation. Sigall and Page (1971) provided further support for this notion in a study of the ratings applied to the concepts "Americans" and "Negroes." Jones and Sigall (1971) suggest three alternative explanations for these findings: (1) the bogus pipeline measures operate like lie detection devices in facilitating scrupulously truthful reporting; (2) subjects under the bogus



conditions embrace the more negative position rather than the positive, since it may be preferable to admit to prejudice and be proven tolerant than to claim tolerance and be revealed as a bigot; and (3) the bogus condition makes the affective component of an attitude more salient than the cognitive component. The resulting response may reflect different dimensions of the attitude being measured. Jones and Sigall suggest that it is too soon to determine which of the three alternatives is most accurate or to decide that bogus pipeline measures of attitude are truer measures than the standard devices used previously or better predictors of overt behavior.

#### c. Relationship between verbal attitudes and overt behavior

The final area to be considered in this review of attitudes measurement methodology is the relationship between verbal attitudes and overt actions toward attitudinal objects. This area is of critical significance since the study of attitudes in the social sciences is important only to the extent that they do relate to behavior. This latter statement would be disputed by proponents of the probability conceptualization of attitude. Such a position would hold that a discrepancy between verbal attitudes and overt behavior merely reflects the differences between the eliciting stimuli and does not reflect upon the validity of the attitude concept. However, proponents of the concept of attitude as a hypothetical construct which acts upon both verbal responses and overt behavior must be able to demonstrate the consistency between verbal attitudes and overt behavior. Deutscher (1966) framed the question more pragmatically. He expressed concern that conclusions from social scientific research, which are primarily based on verbal responses, are guiding social action programs, which are primarily concerned with overt behavior.



A number of studies have been reported which have examined the relationship between verbally expressed attitudes and overt behaviors toward members of minority groups. The classic study in this area was done by LaPiere (1934). He investigated the discrepancy between the treatment of Chinese customers in hotels and restaurants and the verbally expressed position of proprietors on this issue. LaPiere found that 90% of the proprietors who had accommodated LaPiere's Chinese friends reported in writing that they would not serve Chinese. A similar study reported by Kutner, Wilkins, and Yarrow (1952) found a discrepancy between service rendered to a Negro customer and the willingness of restaurants in a Northeastern city to accept reservations for a social group which included Negroes.

DeFleur and Westie (1958) studied the relationship between scores of college students on a rating scale to measure attitudes toward Negroes and the willingness of these students to be photographed with Negroes for a set of slides to be used in situations of graded levels of publicity. Of the twenty-three subjects with the most negative attitudes toward Negroes, five signed more than the average number of uses to which the photographs could be put and nine of the twenty-three unprejudiced subjects signed fewer than the average number of uses. Although a chi-square analysis revealed a significant interaction between attitude and level of agreement, the proportion of inconsistent subjects (14 out of 46) seems large, considering that the sample was selected to represent the extremes of the verbal scale.

A similar study by Linn (1965) attempted to improve on the previous design by (A) making the stimuli in the verbal and overt behavioral situations more similar, (B) reducing any influences on subjects due to the knowledge they were participating in an experiment, and (C) making the behavior situation more credible by having Negroes present. Linn reported that on the attitude questionnaire only two of the thirty-four subjects







said they were not willing to pose with a Negro; but in the actual situation, twelve subjects refused to sign any of the releases. Attitude-behavior discrepancies of two or more levels on the seven-point photograph release scale were shown by 59% of the sample. Generally, the larger discrepancies were for subjects who indicated on the questionnaire a willingness to have the photographs be widely used.

A third study using a commitment to be photographed with Negroes as a dependent variable also suggested other independent situational variables to be considered. Green (1968) examined the variables of the intimacy of the photographed situation and social status of the Negro model as related to an individual's willingness to sign release forms. Green's results indicated that: (A) subjects with moderately favorable attitudes were more willing to be photographed with Negroes than were those with moderately unfavorable attitudes, (B) subjects were less willing to pose for the photographs portraying a high degree of intimacy between themselves and Negroes, and (C) the effect of degree of intimacy was slight when the photograph was to have restricted dissemination, but was strong when many people would see the photograph. None of the other variables or interactions had a significant effect.

Fendrich (1967) studied the attitudes of college students toward Negroes and related these attitudes to a verbal commitment to interact with Negroes and actual participation in discussion groups on racial problems. Fendrich varied the order of administration of the attitude scale and the commitment scale and discovered an interesting association. The relationship between the attitude scale and the overt behavioral scale for subjects who responded to the commitment scale first was quite strong and significant.



However, this association for subjects administered the attitude scale first was not existent.

Warner and DeFleur (1969) further studied the influence of situational variables on the relationship between verbal attitudes and overt behavior. The factors of "social constraint" and "social distance" were systematically introduced as intervening conditions in a study which requested both prejudiced and unprejudiced subjects to make a commitment to engage in behavior involving Negroes. More of the responding low prejudice subjects pledged themselves to the behavior than refused, while the opposite was true for high prejudice subjects. More subjects complied than refused when the requests involved behaviors allowing subjects to maintain status differences; while the opposite was true when status difference reductions were required. When subjects believed that their commitments would be made public, more refused than complied with the request, and the opposite result was obtained for subjects told they would remain anonymous. Further analyses by Warner and DeFleur suggested that low prejudice subjects tended to behave consistently (comply) when their behaviors were anonymous, while high prejudice subjects tended to behave consistently (refuse) when their behaviors were public; also, under the public condition, but not under the private condition low prejudice subjects tended to behave consistently (comply) when the behaviors maintained status differences while high prejudice subjects tended to behave consistently (refuse) when the behaviors reduced social status differences.

Finally, Silverman and Cochrane (1971) reported data to support the proposition that a significant factor in determining agreement between overt and behavioral is the degree of correspondence between the situation depicted in the question to which the subject responds verbally and the situation in which the subject performs the observed overt behavior. They stated that as



the question and the situation correspond less and less, different attitudes become salient in the two situations, resulting in different behaviors.

Many of the discrepancies between verbal attitudes and overt behavior seem to be related to the methodology of collecting data which is relevant to this relationship. Tittle and Hill (1967) examined this assumption in a study which hypothesized that the degree of correspondence between verbal attitudes and overt behavior is a function of (A) the measurement technique used, (B) the extent to which the criterion behavior constitutes action within the range of common experience, and (C) the degree to which the criterion behavior represents a repetitive behavioral configuration. Moreover, this study evaluated the relative predictive efficiency of four frequently used measurement techniques in terms of the degree to which these techniques result in the ability to predict overt behaviors. The measurement techniques evaluated were: (1) Thurstone successive-interval technique, (2) a semantic differential procedure, (3) a summated-rating Likert technique, and (4) a Guttman type scale. Results of this study indicate that only a moderate degree of correspondence between measured attitude and other behavior can be observed when scaling techniques are employed to measure attitude and the behavioral criterion is based upon a consideration of a series of acts occurring under normal circumstances. In regards to the assessment of the alternative measurement strategies, the Likert scale proved to be the best predictor of behavior and the Thurstone scale was the poorest. Tittle and Hill also pointed out that the differential predictive power of the various measurement techniques was partially attributable to the other factors. The reliabilities of the scales were related to predictive power, in that the Likert scale had the highest reliability and the Thurstone scale had the lowest. The percentage of self-referent items in a scale also was related to the predictive ability of the scale. In the Likert scale 87%



of the items contained the personal pronouns "I" or "me"; while the Guttman scale had 60% and the Thurstone scale had only 20%. Also the fact that the Likert scale permitted an intensity rating was considered to have an effect on the scales predictive ability.

In summarizing the conclusions of studies which have examined the correspondence between verbal attitudes and overt behavior, Wicker (1969) stated that it is considerably more likely that attitudes will be unrelated or only slightly related to overt behaviors than that attitudes will be closely related to actions. To a certain extent these conclusions are attributable to the inadequacies of the technical and methodological aspects of measuring verbal attitudes and the practical difficulties of measuring overt behaviors. Wicker (1969) suggests that a wide range of personal and situational factors contribute to the variance in overt behaviors, and the list strongly resembles the factors which were suggested as influencing the validity of the attitude measures themselves. Under personal factors which influence attitude-behavior inconsistency Wicker lists: (A) other attitudes which may be more salient for the subject than the attitude under study; (B) competing motives which might range from persistent unconscious desires to temporary states of arousal; (C) verbal intellectual, and social abilities which may prevent the subject from making the appropriate response; and (D) activity levels which might make the highly active person more likely to act in ways consistent with his attitudes while the apathetic person may not act regardless of his attitudes. Under situational factors, Wicker points out that the more similar the situations in which verbal and overt behavioral responses are obtained, the stronger will be the attitude-behavior relationship. Other situational factors are: (A) actual or considered presence of certain people; (B) the normative prescriptions of proper behavior; (C) the alternative behaviors available; (D) the specificity of







the attitude objects; (E) unforeseen extraneous events; and (F) the expected and/or actual consequences of various acts.

This review of the literature related to the measurement of attitudes has revealed several important features of this area of research. Measurement attempts are hampered in the beginning by different conceptualizations of attitudes, and most of the research that has been done has been limited to studying only a few of the many dimensions of attitudes. The most straight-forward and most frequently used type of attitude measuring instrument, the self-report questionnaire, has been revealed to be very susceptible to response distortion, and this has motivated the use of indirect methods of attitude measurement, relying heavily on deception methodology. Also it has been noted that very little correspondence has been demonstrated to exist between verbal attitudes and overt behavior. While this situation relates to the original statements about the two different conceptualizations of attitude, a definitive choice of one conceptualization over the other cannot be made while shortcomings still exist in the methodologies used in studies relating verbal attitudes to overt behavior. Among these shortcomings, the dissimilarities between the situations in which the verbal attitudes and the overt behavior are measured seem to contribute most to the inconsistencies which have been noted.

#### 4. The Measurement of Attitudes Toward the Stigmatized

An earlier section of this review indicated that there is a diversity of opinion relative to whether or not prejudices or stereotypes exist toward stigmatized persons; and, if they do exist, whether they are favorable or unfavorable. Some of the diversity of opinion may be attributable to the different stimuli used to elicit the attitudes. The ensuing material will identify the types of measuring instruments and the variety of eliciting



stimuli which have been used in studies of attitudes toward stigmatized persons.

#### a. Attitude measures

In the measurement of attitudes toward the stigmatized, as in other areas of attitude measurement, there has been a heavy reliance upon the self-report questionnaire. Among the different varieties of self-reports, the summated rating scale seems to have received the most frequent use. The single most frequently used scale has been the Attitudes Toward Disabled Persons Scale developed by Yuker, Block, and Campbell (1960). This is a thirty-item scale with items selected on the basis of item analysis. Each statement suggests that disabled persons are either the same as or different from physically normal people. Approximately half the items refer to similarities or differences in personality characteristics, whereas the other half deal with the question of special treatment for the disabled. Responses to the items are recorded on a six-point Likert scale ranging from "I agree very much" to "I disagree very much." High scores on the scale presumably reflect a favorable acceptance of the disabled. Psychometric data for the ATDP was obtained from administrations of the scale to students at Hofstra College in New York and to disabled people employed at Abilities Incorporated, a workshop for the disabled in Albertson, New York. Split-half reliabilities range from .78 ( $n=72$ ) to .84 ( $n=110$ ). The ATDP has reasonably good content validity, and significant correlations were found between ATDP and semantic differential scores ( $r = -.26$ ;  $n=110$ ), scores on a job satisfaction scale for disabled workers ( $r = .46$ ;  $n=86$ ), and the Edwards Personal Preference Schedule ( $r = .25$ ;  $n=72$ ). A critique of the scale by Shaw and Wright (1967) suggested that it is suitable for research but that some questions still exist about its validity. One of the most frequent



criticisms of the ATDP is that the general term "disability," when used as the eliciting stimulus, raises too many referents for the respondent. Different subjects may conceive of different disability conditions when responding to the instrument (Siller, 1966). Another criticism is that by employing a single summative score, the ATDP treats this domain of attitudes as one-dimensional, while some of the most promising work in this area, which will be reviewed later in this section, provides support for a multidimensional conceptualization of attitude.

A considerable number of studies have been reported which have used the ATDP (Arnholter, 1962; Bell, 1962; Chesler, 1965; Genskow and Maglione, 1965; Siller, 1963, 1966; Siller and Chipman, 1964; Siller, Chipman, Ferguson and Vann, 1967; Jordan, 1968; Palmerton and Frumkin, 1969, a, b, c, and d; and Anthony, 1968). In addition, the ATDP has been used most recently as a criterion to establish the validity of other measures (Noonan, Barry and Davis, 1970 and Feinberg, 1971). Also, Feinberg (1967) has demonstrated that scores on the ATDP are to an extent influenced by a "social desirability" response bias.

A Likert-type scale very similar to the ATDP was developed by Cowen, Underberg and Verillo (1958) to measure attitudes toward blindness (AB). This is a thirty-item scale for which a single score is obtained. The AB scale has been used most recently by English (1971). Cowen and another group of associates have also developed an Attitude Toward Deafness Scale (Cowen, Bobgrove, Rockway, and Stevenson, 1967) which resembles the structure of the AB scale. Both of these scales have demonstrated a relationship between negative attitudes toward disability and general ethnocentrism.

Several other studies have reported the development and use of summated rating scales of the Likert-type which have only been used in



those particular studies (Semmel and Dickson, 1966; Loeb, Wolf, Rosen, and Rutman, 1968; Rickard, Triandis, and Patterson, 1963; and Mussen and Barker, 1944). Linkowski and Jaques (1969) developed the Concept Association Attitude Scale (CAAS) to attempt to assess affective attitudes as contrasted with direct verbally expressed attitudes which are tapped by standardized paper-and-pencil scales. The CAAS requires that the subject free associate five words in response to different handicaps and then rate the associations on a positive-negative Likert-type scale. The investigators reported that the CAAS demonstrated significant consistency in measurement of attitudes toward social differences.

A small number of studies have reported the use of cumulative rating scales. Handel (1960) and Himes (1960) utilized social distance scales to demonstrate that attitudes toward the blind show evidence of stereotyping and aversiveness to social closeness. Jaffe (1967a) utilized the Bogardus Social Distance Scale in measuring attitudes of high school students toward mentally retarded stimulus persons. Shears and Jensema (1969) employed a social distance scale to compare the acceptability of disabled persons with ten different types of anomalies in social situations.

Another instrument which was used in several studies was the Semantic Differential type of rating scale which was developed by Osgood, Suci, and Tannenbaum (1957). The first application of this technique to the measurement of attitudes toward the stigmatized was the study by Nunnally (1961) of the reactions toward mentally ill persons. Nunnally had his subjects rate the concepts neurotic man, insane man, neurotic woman, and insane woman and compared these ratings to those done on non-stigmatized concepts. Nunnally used sets of bipolar adjectives which tap the usual evaluative, potency, and activity factors and an understandability factor as well. Whiteman and Lukoff (1965) used the semantic differential type of scale





to assess the differences between attitudes toward blindness and attitudes toward blind people as separate concepts. Jaffe (1967a) studied the relationship between contact with the mentally retarded and attitudes toward a person described as mentally retarded using the evaluative, potency, and activity factors of the semantic differential. Again, Jaffe (1967b) used the semantic differential to assess attitudes elicited by labels as compared to attitudes elicited by personality sketches. In this study Jaffe only used sets of adjectives which tapped the evaluative factor. Similarly, Golin (1970) utilized the same sets of adjectives with the semantic differential to determine whether the results obtained by Jaffe (1967b) were due to the amount or the favorability of the information about the stimulus person. Finally, Mackey (1969) examined the ratings of the concepts alcoholic and alcoholism using the evaluative, potency, activity, and understandability scales of the semantic differential.

Relatively few attempts have been made to assess attitudes toward the stigmatized which have not used self-report questionnaires. Feinberg (1971) explored the applicability of the analysis of immediacy in verbal communication as an indicator of attitudes toward the disabled. Subjects were instructed to write a sentence or two about themselves and a disabled person. They were also asked to write on a separate sheet, a sentence or two about themselves and a non-disabled person. Afterwards the ATDP was administered. Results revealed a significant inverse relationship between measured attitudes toward the disabled and the degree of non-immediacy in communications about the disabled ( $r = -.41$ ;  $n=25$ ). Statements about the disabled contained significantly more non-immediacy than statements about the non-disabled among subjects with negative measured attitudes toward the disabled.



Jones and Sigall (1971) reported a study which used the "bogus pipeline" technique, described earlier in this review, to assess reactions to a stigmatized person. In this procedure subjects were asked to rate a confederate of the experimenter who in half of the conditions wore "massive leg braces" and in the other conditions appeared to be physically normal. In all conditions, prior to the ratings, the confederate acted "extremely rude and abusive" to a caller on the phone in the presence of the subject. Subjects who were requested to rate the confederate under the bogus pipeline conditions tended to be more unfavorable in the evaluations, while subjects in the simple rating condition tended to be more favorable. Subjects rating the stigmatized confederate provided more positive responses than subjects rating the normal confederate, but these differences did not reach statistical significance.

Earlier in this review, a number of studies were described in detail, which reported differences in measures of overt behavior when subjects were interacting with stigmatized persons as compared to non-stigmatized persons (Farina and Ring, 1965; Farina, Holland, and Ring, 1966; Kleck, Ono and Hastorf, 1966; Kleck, 1968; and Freedman and Doob, 1968). Only one of these studies needs to be elaborated upon at this point. Farina, Holland, and Ring (1966) examined the role of stigma and a set to understand in an interpersonal relationship, and they attempted to utilize a behavioral measure of reactions toward another person that would have rather clear interpersonal meaning. The measure which was selected was painfulness of electric shock administered by the subject to a stigmatized confederate as the two of them interacted in a teacher-student learning paradigm. The painfulness of the shock administered was determined by multiplying the level of shock intensity which was consciously set by the subject by the duration of the shock as administered by the subject. As predicted by the investigators,

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF THE HISTORY OF ARTS AND ARCHITECTURE

RECEIVED

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

1964

a person was punished less when he was perceived as having had a typical childhood and being normal than when he was seen as having had a poor childhood or as having been mentally ill. When the total punishment scores were analyzed according to intensity and duration of shock individually, the punishment score differences were primarily due to differences in the duration of the shock and were rather slightly enhanced by the intensity scores. These findings by Farina, Holland, and Ring suggest that the overt behavior toward stigmatized persons which signifies prejudicial attitudes may be expressed in actions which are less likely to be consciously monitored by the subjects. Each time the subject chose the intensity of the shock applied in 25 trials for each of two patterns, he received feedback about the intensity chosen since each level was marked from 1 to 10. However, the subject received no quantifiable feedback about the duration of each shock which he administered. Therefore, it was inferred that the subject was not able to monitor his behavior effectively to control the duration of shock.

#### b. Eliciting stimuli

Other attempts to explain the differential findings of research on attitudes toward stigmatized persons have focused on the variety of stimuli used to elicit the responses. The overwhelming majority of studies have used a stigmatizing label to elicit attitudinal responses. Some of the criticisms of the ATDP, which were referred to previously, have suggested that the use of the label "disabled person" leads to subjects responding to a variety of disability types which may account for the variety of findings. Mussen and Barker (1944) asked their subjects to rate "cripples" in general on a number of personality traits. The studies of attitudes toward the mentally ill by Nunnally and Kittross (1958) and Nunnally (1961) utilized the labels "mental patient," "neurotic man (or woman)" and "insane



man (or woman)." The AB scale developed by Cowen et al. (1958) employed the terms "blind person" or "blind people." Semmell and Dickson (1966) assessed the connotative reactions to the labels "blind," "deaf," "mentally retarded," "epileptic," "cerebral palsied," "stutterer," "normal Negro," and "normal white." Mackey (1969) elicited the reactions of professional personnel to the labels "alcoholic man" and "alcoholic woman."

A number of studies have examined the effects of the labels themselves when compared to ratings made on the basis of other information. Guskin (1962 a and b, 1963 a and b) reported a series of studies in which he examined the effect of labels on judgements which were also based on personality sketches, observing actual children through a one-way mirror, and films of children. Guskin concluded that labeling seems to have no function and little use when clearcut observational evidence is available; but when there is little evidence or ambiguous evidence, judgements tend to be invalid, unstable, and open to strong influence from labels. Sarbin and Mancuso (1970) analyzed a variety of social service reports and other data and concluded that the public tends to declare negative valuations on persons diagnosed as mentally ill. On the other hand, the public tends to be more tolerant of deviant conduct when it is not described with mental illness labels.

Jaffe (1967b) compared the differential reactions of subjects to disability labels and to personality sketches of three disabled persons and found that the subjects reacted more favorably and with less variability toward sketches than toward labels. Jaffe (1967a) also used the personality sketch as the stimulus in a study to assess the relationship between contact with the mentally retarded and attitudes toward a person described as mentally retarded. Guskin (1963b) reported using a personality





sketch as an eliciting stimulus in one of his studies reported previously. Loeb, Wolf, Rosen, and Rutman (1968) examined the influence of labels and degree of abnormality on attitudes toward mental patients using biographical sketches. Twelve sketches were utilized to present all combinations of four diagnostic labels and three degrees of abnormality of behavior. The investigators concluded that caution should be exercised in drawing conclusions from studies which rely on diagnostic labels as eliciting stimuli without controlling for the degree of abnormality of behavior. Finally, Golin (1970) utilized personality sketches in examining the relationship between the amount of information supplied, the favorableness of the information and different types of disability used as stimuli. The results of this study indicated that it was the favorableness of the information supplied rather than the amount of information which had a significant effect upon measured attitudes toward both disabled and non-disabled stimulus persons.

Attitudes toward stigmatized persons have also been elicited by other types of stimuli. Winkler (1931) and Ray (1946) both were cited by Barker et al. (1953) as using pictures of disabled persons as eliciting stimuli. Richardson, Goodman, Hastorf, and Dornbusch (1961) had children rank pictures of children with various disabilities and reported a consistent preferential order which the investigators felt reflected a cultural uniformity in reactions to physical disabilities. Wolfgang and Wolfgang (1968) utilized "modified descriptive stick figures" to represent persons with the following conditions: broken arm, amputated leg, obesity, clubfoot, and normal physique. Subjects then were requested to draw stick figures representing themselves as a distance from the other person at which they would feel most comfortable. Guskin (1962a) utilized films of mentally retarded children in one of his studies to assess the effect of



labels on judgements of subnormality.

Finally, a number of studies have utilized actual persons as the eliciting stimuli, although only one study was discovered in which the stimulus persons were actually handicapped themselves. Guskin (1962b) measured attitudes toward mentally retarded children who were observed at play by the subjects. The following studies used confederates disguised as stigmatized persons as the eliciting stimuli: Farina and Ring (1965); Farina, Holland, and Ring (1966); Kleck, Ono, and Hastorf (1966); Kleck (1968); Freedman and Doob (1968) and Jones and Sigall (1971).

#### c. Multidimensional approaches

Another possible explanation of the diversity of conclusions reached by the various studies of attitudes toward the stigmatized is suggested by the findings of several investigators that attitudes toward the stigmatized are multidimensional. A series of studies by Cohen and Struening (1962, 1963, 1964; Struening and Cohen, 1963) have reported the development of the Opinions about Mental Illness questionnaire (OMI). "The OMI is a factor analytically derived set of scales made up of 51 Likert-type items which yield factorally stable scores on five dimensions of attitudes toward the mentally ill: A - Authoritarianism with its characteristic submission, anti-intracception, and view of patients as an inferior, threatening out-group; B - Benevolence, based on humanistic or religious grounds; C - Mental Hygiene Ideology, the tenets of mental health professionals; D - Social Restrictiveness of patients and expatients, who are viewed as a threat to family and society; and E - Interpersonal Etiology of mental illness, particularly parental love deprivation in childhood. There is some tendency for A and D to cluster together, and for B and C to form one cluster and for the two combined clusters to be negatively related. E is



negligibly related to the other scales" (Cohen and Struening, 1964).

Similarly, a series of studies by Whiteman and Lukoff (1964a, 1964b, 1965) reported the development and use of a questionnaire to assess attitudes toward blindness and blind people which attempted to specify components of attitudes. A factor analysis of the responses to the Likert-type items developed by Whiteman and Lukoff identified five factors or dimensions of attitudes toward blindness. The factors were: Personal Attributes, which differentiates respondents according to the degree to which they have a negative view of the emotional life and general competence of blind people; Social Attributes, which relates to the readiness of the sighted person for interaction with the blind and to feelings about the interpersonal competence of blind people; Evaluation of Blindness, which seems to deal with the degree to which blindness is perceived as potentially threatening and as uniquely frustrating to one's self or others; Non-protectiveness, which relates to lack of protectiveness and sympathy; and Interpersonal Acceptance, which refers to an emotional acceptance of blind people in interpersonal situations. This factor analysis was done on the results of questionnaires completed by a group of 58 evening college students and 65 social work students. The utility of the indices developed by Whiteman and Lukoff seems to be limited by the complexity employed.

The most extensive work done on the structural components of attitudes toward the disabled has been conducted by Siller and his associates (Siller, Chipman, Ferguson, and Vann, 1967; Siller, Ferguson, Vann, and Holland, 1967). Siller and Chipman (1964) concluded that the factorial structure of the ATDP was unclear and that the single score labeled "acceptance of the disabled" did not reflect a balanced weighting of the elements of the scale. Siller and Chipman instead identified four factors from the total responses of the subjects, which they labeled "Hypersensitive-Depressed,"



"Benevolent-Inferiority," "Depression-Strained Interaction" and "Negative Atypicality." A more extensive study (Siller, Chipman, Ferguson, and Vann, 1967) further supported the concept of the multidimensionality of attitudes toward the disabled and further indicated that weak ego strength and disturbed object relationships are related to rejecting attitudes toward the disabled.

The previously mentioned studies led Siller and his associates to develop a set of scales which would reliably assess the salient dimensions of attitudes toward disabled persons. Siller, Ferguson, Vann, and Holland (1967) avoided the previous problems associated with the use of the general term "disability" by selecting three types of disability representing key positions on two pertinent continua: functional and cosmetic impairment. The disabilities selected were amputation (middle range on both cosmetic and functional impairment); blindness (highly functional, low cosmetic); and cosmetic conditions (low functional, high cosmetic). A self-report, objectively scored format was selected for the scales, using a vocabulary that is comprehensible from the adolescent age level on. After two preliminary administrations of the questionnaire and subsequent reduction in the number of items in each disability area, three Disability Factor Scales (DFS) were established. The Disability Factor Scale - Amputation (DFS-A) contains 101 items; the Disability Factor Scale - Blindness (DFS-B) is made up of 105 items; and the Disability Factor Scale - Cosmetic (DFS-C) includes eighty items.

The factorial results obtained from the administration of these scales were interpreted as representing salient dimensions of attitudes toward the disabled. Siller and his associates assigned names to these factors by which they tried to reflect the content of the factors. The





DFS-A resulted in seven factors: (1A) Interaction Strain involves distinct uneasiness in the presence of an amputee and an uncertainty about how to deal with the disabled. A second group of items in this factor refer to the arousal of disgust or revulsion, which suggests that emotional aversion may inhibit spontaneous interaction, thus contributing to the experience of strain and to the need for more explicit behavioral guidelines. (2A) Rejection of Intimacy consists of the rejection of close, particularly familial, relationships with amputees. A number of items in the factor reflected a greater degree of deep personal involvement than is present in most other factors, possibly reflecting a strong rejection of amputation in the self. (3A) Generalized Rejection reflects distinct anti-amputee reactions, negative descriptions of amputees, and segregation of the amputee from others. (4A) Authoritarian Virtuousness seems to possess a double-edged character with the simultaneous loading of items endowing amputees with exceptional qualities and others pleading for tolerance and special treatment for them because of their shortcomings. A third group of items involve self-reference and describe the respondent as extra favorable toward amputees. The experimenters further described it thus: "The over-all impression is of a 'do-gooder' orientation, involving a rather undifferentiated, positive, benevolent approach whose origins would appear to be in a wider moralistic system and are consistent with a 'charitable' self-image maintained by the respondent." (Siller et al., 1967, page 20). (5A) Inferred Emotional Consequences contains statements hostile to the amputee, with items that refer negatively to the amputee's character and emotionality. (6A) Distressed Identification involves highly personalized reactions to disability with the amputee named as the stimulus which activates anxiety about the respondent's own vulnerability.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial matters. The text notes that without reliable records, it is difficult to track progress, identify trends, and make informed decisions.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It mentions the use of surveys, interviews, and focus groups to gather qualitative information, as well as statistical software and data visualization techniques for quantitative analysis. The importance of ensuring the reliability and validity of the data is stressed throughout this section.

3. The third part of the document describes the process of interpreting the results of the data analysis. It highlights the need to consider the context of the data and to be cautious about drawing conclusions based solely on the numbers. The text suggests that a combination of quantitative and qualitative insights is often necessary to gain a comprehensive understanding of the situation.

4. The fourth part of the document discusses the challenges and limitations of the research process. It acknowledges that there are always potential biases and errors in data collection and analysis, and that the results may not be generalizable to all situations. However, it also notes that by following rigorous research practices, these challenges can be minimized.

5. The fifth part of the document provides a summary of the key findings and conclusions. It reiterates the importance of accurate record-keeping and the value of a multi-method approach to data collection and analysis. The text concludes by emphasizing the need for ongoing monitoring and evaluation to ensure that the information gathered is used effectively to inform decision-making and improve outcomes.

(7A) Imputed Functional Limitations focuses on whether the amputee can function adequately and effectively in a number of typical and crucial situations.

The factors which characterized attitudes toward the blind were the same as those which were discovered to be the basis of attitudes toward amputees. Seven factors were identified and given the same names as the factors for the DFS-A. Many items which dealt with functional limitations, however, were not applicable to cosmetic conditions. Two factors obtained from DFS-C were sufficiently similar to those described above from DFS-A to be similarly named: Interaction Strain (1C) and Rejection of Intimacy (2C). Two other factors from DFS-C were roughly similar to factors from the other scales. Reluctant Aversion (3C) is similar to Generalized Rejection of DFS-A and B in that aversion is expressed and segregation is desired, but empathy is not disturbed and an element of apology for the feelings is included. Superficial Empathy (4C) seems to relate to Authoritarian Virtuousness in that both positive and negative traits are included. The ambivalence expressed in this factor led the researchers to be uncertain of the ultimate meaning of a high score on this factor. Two factors which were unique to the Cosmetic scale were: Qualified Aversion (5C), which consists of a qualified aversion expressed toward cosmetic conditions which are assumed to be controllable, and Proximate Offensiveness (6C), which seems to express moral indignation in the context of close physical contact with cosmetic impairments which are assumed to be controllable.

Most recently Siller (1970) has reported the development of a general Disability Factor Scale (DFS-G) built from the three previous scales. This scale uses items that relate specifically to a variety of disabling physical conditions and thereby avoid the problem of using the



ambiguous term "disability." When this scale was administered to a group of 772 subjects, the results revealed seven factors which were identical to those found in the DFS-A and B. From these results Siller concluded that the structure of attitudes toward a variety of disability conditions is organized primarily by attitudinal dimension rather than by type of condition.

Finally, Sloat and Frankel (1972) raised additional questions about the validity of the traditional unidimensional approach to measuring attitudes toward disabled persons. Sloat and Frankel used a components of variance method of attitude measurement which led them to conclude that attitudes toward persons with physical disabilities are not merely the result of individual differences, particular disabilities, social situations, sex of target persons or attitude-content items. Instead, Sloat and Frankel concluded that such attitudes are complex functions of all of these factors and possibly other factors which are still undetermined.

This review of the research related to attitudes toward stigmatized persons has demonstrated the existence of many of the same problems which characterize the research on attitudes in general. There has been a heavy reliance upon the use of self-report questionnaires, and the problems associated with this type of measure have led to variable conclusions. The variability in results can also be attributed to the different types of eliciting stimuli which have been used. However, there does seem to be some agreement in the conclusions of those studies which have measured physiological and behavioral responses to stigmatized stimulus persons. When the measurement of attitudes is not based upon the types of responses which are subject to conscious control, there seems to be a definite indication that stigmatized persons are reacted to differently. These findings



may be further elaborated by the continued development of the multidimensional, factorally-based type of attitude scales.

#### 5. Summary of Literature Review and Rationale for the Present Study

It has been noted in the preceding literature review that the attempts to measure attitudes toward stigmatized persons have been characterized by the same problems which have been found in other attitude research. Much of the research has utilized self-report questionnaires and other methods which are susceptible to the conscious control of responses; while other research has attempted to avoid the effect of the subject's awareness that his attitudes are being measured. Methodological problems have been thought to be responsible for many of the discrepancies which have been found between verbal attitudes and overt behavior. However, measures of behavior toward stigmatized persons have been consistent in demonstrating a differential treatment of such persons. Similar findings have also been noted in studies of the attitudes and behavior of rehabilitation personnel toward stigmatized persons.

It was also suggested in the literature review that, contrary to what might be expected, rehabilitation personnel may possess attitudes toward stigmatized persons which do not differ significantly from similar attitudes possessed by the general public. This conclusion is more strongly supported by those studies which utilized behavioral indicators of attitude as opposed to studies which utilized paper-and-pencil measures. The differences resulting from the type of measure employed are not unexpected, since the responses to paper-and-pencil measures, especially the ATDP, have been shown to be susceptible to the influence of social desirability and subject to conscious control. On the other hand the behavioral measures







used were based on reactions and decisions which were not subject to conscious distortion or were observed and recorded in situations which were not identified as attitude measurement situations. It is to be expected that professional personnel engaged in the rehabilitation of stigmatized people would be highly motivated to present themselves as accepting of such persons and would control any expressions of negative affect toward stigmatized persons whenever possible.

One of the purposes of the present study is to investigate whether or not students who are preparing to serve as rehabilitation counselors and graduates of a rehabilitation counselor training program express different attitudes toward stigmatized persons than toward non-stigmatized persons. The methodology of the study also permits an exploration of the different attitudes expressed toward different types of stigmatized persons. The eliciting stimuli for most of the attitude measures used in the study were short personality sketches which described an amputee, a blind person, an addict, a mentally ill person, a mentally retarded person and a non-stigmatized person.

A second purpose of the study is to determine whether subjects at one level of training as rehabilitation counselors express different attitudes toward stigmatized persons than do subjects at the other levels. The rehabilitation counseling students who served as subjects for this study represented three levels of training in the program and the graduates were considered a fourth level.

A third purpose of the study is to examine the relationship between attitudes expressed toward stigmatized persons by rehabilitation counselors and ratings of the effectiveness of these subjects as counselors. Although no previous studies were found that investigated this type of relationship,



the present study offers the opportunity to gather data on this point.

A fourth purpose of the study is to compare different attitude measuring instruments in the same study, comparing verbally expressed attitudes to overt behaviors, comparing attitudes elicited by explicit instruments with attitudes elicited by implicit instruments, and comparing factor scores elicited by a multidimensional instrument with attitudes expressed in response to the other instruments.

#### D. Hypotheses

The preceding literature review suggests the following hypotheses:

1. Rehabilitation counseling students and graduates will express different attitudes toward stigmatized stimulus persons than toward non-stigmatized stimulus persons, as measured by a semantic differential type of rating scale, by an analysis of verbal immediacy, and by the measures of attitudes elicited through the simulation of behavior therapy.
2. Differences will be found in the favorability of attitudes expressed toward different types of stigmatized stimuli.
3. Individuals in each of the four groups as determined by level of training will not differ in attitudes expressed toward stigmatized persons when compared to individuals in the other three groups.
4. Favorable attitudes toward the stigmatized as expressed by students at the intern level and graduates will be found to relate positively to ratings of counselor effectiveness.

In addition to these hypotheses, the data will be analyzed with the intent of providing answers to the following questions which are of interest.

1. To what extent are all the measures of attitude related to each other?



2. Do the explicit measures of attitude (the Disability Factor Scales, the semantic differential type of rating scale, and the setting of the decibel level of the aversive stimulus) correlate more with each other than with the implicit measures?

3. Do the implicit measures of attitude (the analysis of immediacy and the duration of the application of the aversive stimulus) correlate more with each other than with the explicit measures?

4. Do the attitude measures which used the personality sketches as the eliciting stimuli correlate more with each other than with the factor scores obtained in the Disability Factor Scales which are elicited by labels?



## II. PROCEDURES

### A. Subjects

The participants in this study were students who were enrolled in the Rehabilitation Counselor Training Program at the University of Pittsburgh during the winter term of the 1972-73 academic year and rehabilitation counselors who had graduated from this training program prior to April, 1972. The students who participated were each at one of three levels of training: first trimester of study, second trimester or fourth trimester (internship). All of the student participants were full-time graduate students, with the exception of three part-time students who had just begun the program and who were added to the first trimester group to equalize the number of subjects in each group. The 40 students ranged in age from 22 to 57, with a mean age of 26.3 years. The mean age of each of the four groups was: first trimester, 23.5; second trimester, 24.2; interns, 28.0; and graduates, 29.4. Sixteen of the 40 subjects were males; three in the first trimester of study, five in the second, six at the internship level and two graduates.

The students who participated in the study were assumed to have been selected into the program from the same population. The only change in selection criteria which had been implemented in the year preceding the study was the establishment of 3.0 Q.P.A. as a minimum standard effective as of September, 1972. A preliminary test of the mean undergraduate Q.P.A. scores and of the mean Miller Analogies Test scores revealed no significant differences among the groups. Because of the restricted nature of the





population under study, the conclusions drawn from this study are directly applicable only to students selected into the Rehabilitation Counselor Training Program at the University of Pittsburgh. These conclusions are generalizable to individuals from other rehabilitation counselor training programs to the extent that they can be assumed to resemble the individuals in the present study.

The Rehabilitation Counselor Training Program at the University of Pittsburgh, is a two-year program, necessitating sixty credit-hours of study. During each of four trimesters the students gain experience in rehabilitation agencies in the Pittsburgh area. For the first three trimesters, the students spend two days a week at practicum assignments in addition to their class hours. During the fourth trimester each student completes a 4½ day per week internship at a rehabilitation agency. In addition to this extensive experience in an actual rehabilitation setting, another characteristic of the University of Pittsburgh program is relevant to the focus of this study. Stigmatized individuals are frequently accepted into the program for training as rehabilitation counselors. The subjects of the present study had classmates who were totally blind, or confined to a wheelchair, or deaf.

All subjects for this study were volunteers. They were contacted individually by the experimenter and were asked to participate in a study of the decisions made by rehabilitation counselors when using "behavior therapy" with a number of simulated clients. All of those contacted were assured that their reactions would be recorded anonymously and that approximately 1½ hours of their time would be required. The possible biasing effect of "self-selection" was minimized by the fact that for the fourth trimester group, ten individuals were contacted and ten agreed to



participate; for the second trimester and for the graduate groups, only eleven individuals had to be contacted before ten volunteers were found; and for the first trimester group, twelve individuals were contacted before ten were found who agreed to participate.

Each intern student and graduate who participated in the study also had to be working under a supervisor who was able to rate the participant's effectiveness as a counselor.

### B. Verbal Measures of Attitudes

Three "paper-and-pencil" measures of attitude were used in the present study, and the simulated conditioning paradigm resulted in three behavioral measures of attitude toward the stimulus persons.

#### 1. Disability Factor Scales - General

The development of the Disability Factor Scales by Siller and his associates has been described above. Siller (1970) reported a study to determine whether the structure of attitudes toward a variety of disability conditions is primarily organized by specific disability type or by attitudinal dimensions that are general to a wide variety of conditions. A second purpose of Siller's study was to develop a multidimensional instrument that would measure consistent reactions across a variety of disabling physical conditions without having to use the ambiguous term "disability" itself.

A 120-item Likert-type questionnaire was administered by Siller to 772 subjects. The subjects were 339 males and 433 females whose ages ranged from 15 to over 70. The items on the questionnaire reflected eight dimensions of attitudes toward specific disability conditions. The



dimensions were: (1) Interaction Strain, (2) Rejection of Intimacy, (3) Generalized Rejection, (4) Authoritarian Virtuosity, (5) Inferred Emotional Consequences, (6) Distressed Identification, (7) Imputed Functional Limitations, and (8) Denial of Severity. In addition, there were nine types of disability varying in visibility, seriousness, and frequency. The disability types were: (1) amputation, (2) blindness, (3) deafness, (4) facial scars, (5) epilepsy, (6) cancer, (7) paralysis, (8) hunchback, and (9) heart trouble.

The results obtained from this questionnaire were analyzed by means of a factor analytic rotation to targets of disability types and of attitude dimension. This analysis supported the acceptance of attitude dimension as the more potent organizing basis for attitudes in the area of physical disability. The goodness of fit of the items for the attitude dimensions were in the .70's and .80's with only two exceptions, while the highest coefficient for disability type was .43. Similarly for the attitude dimensions the alpha measures of internal consistency were .85 through .87, except for the two dimensions having low goodness of fit which had alpha's of .73 and .70. Alpha's for scales constructed using disability type were all in the .50's and .60's with one reaching .71. Only seven of the eight attitude dimensions found in previous research were found to be viable when applied to the questionnaire involving nine disability conditions. The factor labeled Denial of Severity did not prove to be viable; while the factor Imputed Functional Limitations was found to be weaker than in previous research.

Further inspection of the results indicated that the 36 items that missed their target, were factorally complex items from the Denial of Severity factor. The remaining 84 items were then rotated to a seven factor



solution based on the attitude dimensions, which resulted in the selection of the 69 items which make up the present General Form of the Disability Factor Scales. DFS-G has nine items which load significantly on Interaction Strain; eleven items on Rejection of Intimacy; twelve on Generalized Rejection; ten on Authoritarian Virtuousness; eight on Inferred Emotional Consequences; twelve on Distressed Identification; and seven on Imputed Functional Limitations: Epilepsy. Siller noted that the coefficients of internal consistency for the first six factors range from .82 to .86; while the alpha for the Imputed Functional Limitations: Epilepsy was .76. The close identification of the latter factor with Epilepsy is due to the fact that five of the seven items on this scale refer to epilepsy. In an unpublished report on the study cited above, Siller indicated that the factors Interaction Strain, Rejection of Intimacy, Inferred Emotional Consequences, and, to a lesser degree, Generalized Rejection correlate moderately with each other, but that Authoritarian Virtuousness, Distressed Identification, and Imputed Functional Limitations: Epilepsy are much more independent from the other scales. According to Siller, the high reliabilities of the individual scales would indicate that even where there is much shared variance, substantial variance specific to each scale remains.

The 69-item DFS-G scale (see Appendix A) was administered to the subjects in the present study. The Likert-type items were followed by six possible responses from which the subject chose the response which best expressed his opinion. The six choices were: (1) strongly agree, (2) agree, (3) not sure but tend to agree, (4) not sure but tend to disagree, (5) disagree, and (6) strongly disagree. This measure yielded seven factor scores, with the lower score indicating the more definite presence of the attitude dimension which is described by that factor.





In the present study, the coefficients of internal consistency for each of the seven factors as administered to 40 subjects ranged from .64 to .89. The individual coefficients were: Interaction Strain, .64, Rejection of Intimacy .85, Generalized Rejection .82, Authoritarian Virtuousness .87, Inferred Emotional Consequences .79, Distressed Identification .89, and Imputed Functional Limitations: Epilepsy .71. These scores were close to those reported by Siller, except for the Interaction Strain factor, which in the present study produced a somewhat lower level of internal consistency than the .83 reported by Siller.

## 2. The Semantic Differential Rating Scale

A semantic differential type of rating scale has been used to assess positive or negative attitudes toward stigmatized persons by Wang (1962), Jaffe (1967), and Golin (1970). The semantic differential scales are bipolar scales which are anchored at each pole by an adjective describing one side of a semantic continuum. The subject rates a concept, or in this case a stimulus person, by placing his check mark at the point on this continuum where he feels the concept lies. The scales are anchored by sets of adjectives which Osgood, Suci, and Tannenbaum (1957) have demonstrated in their work to relate to one of the three major factors--evaluation, potency, and activity. The evaluation scales utilized by Wang (1962), Jaffe (1967), and Golin (1970) were anchored by the following adjective pairs: Valuable-Worthless, Clean-Dirty, Tasteful-Distasteful, Warm-Cold, Deep-Shallow, Easy to get along with-Hard to get along with, Self-reliant-Dependent, Reliable-Unreliable, Neat-Sloppy, Not dangerous-Dangerous, and Employable-Unemployable. Jaffe (1967) in his study found the internal consistency coefficients of the factor which was measured by these scales to be .72 for the amputee sketch, .84 for the mentally retarded sketch, and .83 for the sketch of the



former mental patient.

The coefficients of internal consistency which were produced by the Semantic Differential type of rating scale in the present study were slightly higher than those reported by Jaffe. The coefficients were .93 for the amputee sketch, .96 for the blind sketch, .89 for the addict sketch, .88 for the psychiatric sketch, .88 for the mentally retarded sketch, and .91 for the control sketch.

The continuum which the subject marked was divided into seven segments and each segment corresponded to scores from one to seven, with the more negative end of the scale receiving a seven. The scores assigned on each scale were totaled to obtain one score for the stimulus person being rated, with the higher score being related to the more negative attitude. Also, the end of the scale characterized by positive versus negative adjectives was varied randomly (see Appendix B).

### 3. Analysis of Verbal Immediacy

Another measure of attitude used in the present study was the analysis of the amount of non-immediacy contained in communications written by the subject about the sketch person. This technique has been developed by Wiener and Mehrabian (1968) and consists of breaking down each communication into scorable units and analyzing each unit for the presence of verbal expressions which convey an attenuation of the directness and intensity of interaction between the communicator and the object of communication. Wiener and Mehrabian have identified nine categories of verbal expressions which are relevant to non-immediacy. Each unit of communication receives a score of one for each example of non-immediacy contained in that unit and the scores for each unit are averaged to arrive at a non-immediacy score for the



communication itself.

Wiener and Mehrabian (1968) reported that the reliability coefficient was .80 for the mean non-immediacy scale scores assigned by two judges to subject's responses in each of three experiments. In each of these three studies the hypothesis was that negative affect, non-preferential status, or negatively evaluated events are associated with more non-immediacy in verbal communications. The first study investigated communications about a negatively versus positively experienced event in which the affect was experimentally induced. The second and third studies were designed to test the same hypothesis when the communications were about a pre-existing negative versus positive affect, preference of evaluation of a person. In all three studies the hypothesis was accepted. In addition, the analysis of verbal immediacy was used in a study of attitudes toward handicapped persons by Feinberg (1971).

In the present study the subjects were instructed to write a communication, approximately a sentence or two, about themselves and the person described in each sketch (see Appendix B). These communications were scored by two judges who were speech therapists engaged in graduate work in communications and who were naive in regard to the nature of the hypotheses being studied. The judges were trained for this task by reading the appropriate sections of Wiener and Mehrabian (1968) and through practice on data from pilot studies. A third person was used to perform the task of dividing the communications into scorable units to reduce the variability between judges that arises from this part of the scoring procedure. All the written statements were independently scored for non-immediacy by the two judges and the non-immediacy scores for each statement as assigned by the two judges were averaged to result in one non-immediacy score for each subject's statement about each stimulus person.



It should be noted that even though this measure is based upon the number of non-immediate expressions in each communication, the originators of the technique have labeled it an analysis of verbal immediacy, and this practice has been continued in the present study. This misnomer should not be regarded, however, as implying that the immediacy scores reflect the amount of closeness or warmth contained in the communication. In the present study, the non-immediacy scores are merely the number of non-immediate expressions contained in the communications that were scored, even though the title of the procedure is the analysis of verbal immediacy.

In the present study, the reliability coefficients for the non-immediacy scores assigned by the two judges to subjects' responses in each of the six conditions were .96 for the amputee sketch, .88 for the blind sketch, .95 for the addict sketch, .93 for the psychiatric sketch, .93 for the mentally retarded sketch, and .96 for the control sketch. The inter-judge agreement in the present study was somewhat higher than that reported in the previous studies by Wiener and Mehrabian. Much of this improvement can probably be attributed to the use of a third person to divide the communications into scorable units so that the variability arising from that rather technical task did not become variability in the scores assigned by the judges.

### C. The Eliciting Stimuli

The same set of personality sketches were used as eliciting stimuli for semantic differential scales, for the analysis of immediacy and for the behavioral measures employed. Each personality sketch consisted of a paragraph of four sentences. Three of the sentences in each paragraph contained biographical data about the stimulus person and the other sentence





contained the stigmatizing information or a control statement. The basic paragraphs were written in such a way as to allow the insertion of each of the five "stigmatizing sentences" or the control sentence in each of the six basic paragraphs. The "basic" sections of each sketch were rated using the semantic differential scales described above in a pilot test and it was determined that they elicited equivalent reactions. In addition, six sets of personality sketches were assembled by rotating each of the "stigmatizing sentences" and the control sentence in each of the basic paragraphs. The sets were randomly assigned to the subjects to be used as the eliciting stimuli for the semantic differential scales, the analysis of immediacy, and the behavioral measures. The set of sketches that a subject responded to for the behavioral measures was the same set that he responded to for the verbal measures. The order of stigmatizing conditions as presented in each set of personality sketches was also randomly varied. The six basic paragraphs and the six modifying sentences are contained in Appendix C.

For the Disability Factor Scales, the eliciting stimuli were the particular labels or descriptions of stigmatizing conditions used in each item of the scale.

#### D. Measurement of Behavior Toward Stigmatized Persons

Prior to taking the battery of written measures of attitude, the subjects participated individually in a simulation of the use of a type of behavior therapy which relies upon aversive conditioning, and which yielded three measures of overt behavior toward stigmatized persons.

When a subject arrived at the testing room, he was seated at a table on which was located a tape recorder and earphones, a reading stand, and a box which had on it, (1) a dial that could be set at levels marked from one to ten, and (2) a push-button. After a short conversation to



establish rapport, the subject was read the following statement by the experimenter:

In this procedure, I would like you to play the role of a counselor who is working with a number of clients who are trying to stop smoking. To help these clients, you have decided to use a type of behavior modification. Even though you may personally disagree with this type of therapy, it is important that during this procedure, you try to put yourself into the role of a counselor who is trying to make this type of therapy effective.

You will be using a type of aversive therapy, which means that you will be administering to a series of simulated clients a very unpleasant noise whenever the client reads a statement that is in some way connected with smoking.

In this procedure, you will be introduced to six clients, one at a time, by means of very short personality sketches. After you put on the earphones, you will hear one of the sketches read to you while at the same time you can be reading a copy of the sketch yourself. I want you to imagine that the person described by this short sketch is sitting here in this room with you. He is listening to very pleasant music that he likes very much. The music is being supplied to him through a set of earphones which in turn are attached to a tape recorder. The music has been recorded on a four-track tape. The track opposite the music is completely filled with a very unpleasant noise which is similar to the sound of chalk screeching on a chalk board. The track of the tape which contains this noise is controlled from the box which is sitting in front of you. If you push the button on this box, the client will hear the unpleasant noise instead of the music, and he will continue to hear the noise as long as you are pushing the button. Also, the dial on the box in front of you controls the loudness of the noise that the client will hear. The number 1 indicates the quietest noise, and number 10 indicates the loudest noise. If you put on these earphones, I will first give you an example of what this noise sounds like at level 1, and then you will also hear an example of this sound at level 5. (Play sound)

Do you understand how this device operates?

I want you to imagine that while your client is sitting here listening to the music, he is also reading aloud a list of phrases and sentences which may or may not be associated with smoking. A copy of this list is taped to the control box and you will also hear the list read on the cassette that you will be listening to. To make this type of therapy effective you should apply the unpleasant noise stimulus after each statement which is connected with smoking. You may want to change the loudness of the noise that you administer or the length of time that you administer it



according to how closely you see the statement as being related to smoking or according to how you perceive the needs of the individual clients. This can be done by setting the "loudness" levels that you choose.

Do you understand what has been said so far? If not, would you like to have these instructions or any part of them reread?

When you put on the earphones, you will hear a short biographical sketch of your first client read to you. At the same time you can read a copy of the sketch yourself. After reading the sketch you can prop the written copy on the reading stand and refer to it as necessary during the course of the therapy. Please try to concentrate on the description of the client and make your treatment suitable to his needs.

After hearing the biographical sketch, you will hear the client reading the list of statements, some of which are related to smoking. A short delay will be included between the statements to allow you sufficient time to administer the noise and to select the "loudness" level that you want to use for the next statement.

After the first client, a second client will be presented and the procedure will continue until you have used the technique with a total of six clients.

Do you have any questions?

Keep in mind that for each statement you may want to change the "loudness" level before pushing the button, and you can push the button for as long as you feel is necessary up until time when the next statement is read.

A few of the subjects reacted to the first paragraph of the preceding directions in such a way as to indicate to the experimenter that they may not be very comfortable adopting the role of a counselor who is using aversive conditioning. Whenever this was noticed, the experimenter interrupted the reading of the directions and encouraged the subject to discuss his reaction to this aspect of the study. It was pointed out to the subject that others had a similar reaction and that he was still free to withdraw from the procedure if he so wished. It was emphasized that his participation was useful for the study only to the extent that he



was able and willing to assume the role of a person who was sincerely trying to make the aversive conditioning effective. None of the subjects chose to withdraw from the procedure at this point.

The client's statements were recorded on tape in advance and the same recording was used to represent each client to assure standardization. A time lapse of twenty seconds was incorporated into the recording of the clients' statements between each statement for two purposes: (1) to allow the subject to apply the aversive stimulus for whatever duration of time he prefers up to a maximum of twenty seconds, and (2) to permit the subject sufficient time to refer to the written copy of statements which will be before him so that he can anticipate the upcoming statement and change the level of intensity if he desired.

The fifteen statements contained eight that related to smoking in a positive way and seven that were not related to smoking or were related to non-smoking. The eight smoking statements were: (1) Smoking relaxes me, (2) Nicotine, (3) Do you have a cigarette? (4) Do you have a light? (5) I need a smoke, (6) I smoke two packs a day, (7) There's nothing I enjoy better than a cigarette, and (8) Let's take a smoke break. The seven non-smoking items were: (1) It's time for lunch, (2) I need a drink, (3) I can breath again, (4) Fresh air, (5) What time is it? (6) I quit smoking last week, and (7) Good health and long life.

This procedure resulted in three behavioral measures of attitudes toward stigmatized and non-stigmatized persons: an intensity score, a duration score, and a total noise score which is a function of the first two. The intensity score is the sum total of the loudness levels set by a subject in response to the client's statements. To control for an excessive punishment tendency in some subjects the levels set on neutral





statements as opposed to smoking-related statements was subtracted from the intensity score whenever the subject administered the sound in response to the neutral statement in question for each of the six conditions. However, when a subject responded to neutral items in one stigmatized condition, but not in others, that response was included. The intensity score was considered more susceptible to the conscious control of the subject since he was aware that it was being recorded and since he received feedback about the levels he chose from the fact that the dial was clearly marked.

The second behavioral score was the duration score. The duration score is the total number of seconds during which the aversive noise was administered for each stimulus person. Once again, the duration of noise administered in response to neutral statements was subtracted from the duration score whenever the subject administered the sound in response to the neutral statement in question for each of the six conditions. The push-button on the control box was wired into a timer which measured the duration of the button-push in tenths of seconds. The timer was located in an adjacent room and the fact that the duration was being precisely measured was not communicated to the subject. The duration score can be considered less susceptible to conscious control by the subject since he was not aware that duration was being measured and since he had no easy way to relate the duration of the noise that he administered in one situation to the duration administered in another.

The third behavioral measure was the total noise score which is a function of the level of intensity multiplied by the duration of the button-push.

The intensity levels chosen by the subjects were recorded by the experimenter who was sitting next to the subject. The duration of the button-push that was measured on the timer in the adjacent room was



recorded by the experimenter's assistant who then reset the timer after each push.

#### E. Additional Procedural Details

After the subject completed the simulation, he was taken to another room where he was administered the verbal measures of attitude. Since the measures were taken anonymously and the data was identified only by numbers, the first page of the test battery solicited from the subject the information needed for the analysis of the data relative to the hypotheses. The subject was asked to indicate his or her sex, and how many trimesters of study he or she had completed.

Each of the first six pages of the test battery contained three things: (1) One of the six personality sketches which were used to represent the subject's clients during the simulation, (2) the analysis of immediacy measure which consisted of the direction for the subject to: "Write a short statement, a sentence or two, about yourself and the person described above." After this direction space was allotted for the written communication. (3) The eleven semantic differential scales described above with the following direction: "Please rate the person described above on each of the following scales. Place a check mark closer to one end of the scale or the other according to the end of the scale that you feel is most characteristic of this person. If you consider this person to be neutral on the scale, then you should place your check mark in the middle space. Please check every scale and make your judgements based upon what these adjectives mean to you" (see Appendix B).

The remainder of the test battery consisted of the Disability Factor Scales with the appropriate directions.



#### F. Rating of Counselor Effectiveness

Ratings of counselor effectiveness were obtained on those subjects who were students in the fourth trimester of study or who were graduates of the rehabilitation counselor training program. Ratings of the first and second trimester students were not used since ratings of their effectiveness as counselors would primarily reflect their lack of experience as counselors. The ratings that were done were supplied by the supervisors of the respective subjects at the agencies where they were employed or, in the case of students, where they were doing their internships. The supervisors rated the subjects using a slightly modified version of the Counselor Rating Blank which was developed by Whiteley, Sprinthall, Mosher, and Donaghy (1967). This rating scale was intended to provide an overall rating of counselor competence, ratings of flexibility in the counseling process, and ratings of response to supervision. Subscales were included under each of the latter two categories; and each subscale and the summary category was rated on a seven-point cognitive flexibility-rigidity scale. A score of one on any scale would indicate a high order of cognitive flexibility in counseling, and a score of seven, a high order of cognitive rigidity in counseling. Short descriptions of both flexible and rigid counseling behaviors are provided for each of the subscales. For the present study, the overall rating of competence has been extended to an eleven-point scale to permit and encourage a more discriminating rating. This particular rating scale was used since the flexibility-rigidity dimension seemed to be especially relevant to a study of attitudes toward stigmatized persons. The modified scale used in the present study is contained in Appendix D.

Whiteley et al. (1967) have reported that the Spearman rank-order coefficients of correlations between the overall scores and the scores on



each of the eight subscales ranged from .91 to .95. The coefficient of internal consistency for the rating scale used in the current study was .81. Since sixteen different raters were providing ratings on twenty students and graduates in the present study, additional efforts were made to promote inter-judge agreement. The nature of the rating form was such that specific examples of flexible and rigid counseling behaviors were provided for each subscale to help the raters to focus on the behaviors hypothesized as indices of the organizing flexibility-rigidity construct. In addition, the experimenter hand-delivered the rating form to the raters and was present while the rating was made. In this way the experimenter was available to clarify in a consistent way any ambiguity that the raters perceived in the scales. None of the raters raised any questions about the content of the items but there was some ambiguity associated with the directions.





### III. RESULTS

This chapter, presenting the results obtained in this study, will be divided into three main sections. Section "A" will report the results of the repeated measures analyses of variance which were used to test Hypotheses I, II, and III. The repeated measures analysis of variance procedure takes into account the fact that the scores obtained in each of the conditions will be correlated by nature of the fact that they result from repeated measures on the same subjects. This source of variability is estimated through the repeated measures procedure and the sensitivity of the test is thus increased. A separate analysis was done for each of five measures (the semantic differential rating, the analysis of immediacy, the intensity score, the duration score, and the total noise score) to test Hypotheses I and II. These same five analyses plus one additional analysis for the Disability Factor Scale scores was necessary to test Hypothesis III.

Section "B" will report the results which relate to Hypothesis IV. Pearson Product Moment correlation procedures were used to test the relationship between attitudes toward stigmatized persons and ratings of counselor effectiveness. Six correlation matrices were generated, one for each of the five stigmatizing conditions and one for the control condition.

Section "C" will report those aspects of the six correlation matrices which answer the questions concerning the relationships among the various attitude measures.

The raw scores obtained on each of the six attitude measures are reported in Appendix E.



A. Attitudes Toward Stigmatized and Non-Stigmatized  
Stimulus Persons and among Groups of Counselors

Whether rehabilitation counseling students and graduates expressed different attitudes toward stigmatized versus non-stigmatized stimulus persons (Hypotheses I), whether differences are found in the favorability of attitudes expressed toward different types of stigmatized stimulus persons (Hypothesis II), and whether individuals in each of the four groups as determined by level of training differed in attitudes expressed toward stigmatized persons (Hypothesis III) are questions which were answered by each of five of the attitude measures which were employed in this study.

1. Semantic Differential

A repeated measures analysis of variance done on the scores elicited by the semantic differential type of rating scale is summarized in Table 4.1.

TABLE 4.1

REPEATED MEASURES ANALYSIS OF VARIANCE FOR  
A SEMANTIC DIFFERENTIAL TYPE OF RATING SCALE

Source of Variation	Sum of Squares	d.f.	Mean Square	F.
<u>Between Subjects</u>				
A (level of training)	1135.71	3	378.57	0.83
Subjects within groups	16315.08	36	453.19	
<u>Within Subjects</u>				
B (Stigma conditions)	981.92	5	196.38	8.73*
AB	525.96	15	35.06	1.56
B X subjects within groups	4045.61	180	22.47	

\* significance beyond .05 level of confidence



This analysis indicated a significant difference beyond the .05 level for ratings done on individuals in different stigma categories. However, a significant difference was not found for subjects at different levels of training, nor for any interaction effect between levels of training and stigma category.

The mean ratings for the six conditions in order from most negative to most positive were: Addiction, 34.80; Psychiatric, 34.40; Non-stigmatized, 33.55; Mental Retardation, 30.77; Amputation, 30.30; and Blindness, 29.85. The range of possible scores for this measure was from 11 to 77, with the lower score indicating the more favorable rating. The mean score for each of the conditions was located in the favorable half of the scale but close to the neutral position. Post Hoc comparisons done on these mean ratings using Scheffe's method of multiple contrasts revealed an interesting pattern of significant relationships. The three conditions which received the most negative ratings (addiction, psychiatric, and non-stigmatized), when considered as a group, differed significantly from the three conditions receiving the more positive ratings (mental retardation, amputation, and blindness). Similarly, when each of the conditions in the more positive group were contrasted separately with each of the conditions in the more negative group significant differences were discovered. Also, when the three stigmatizing conditions which were rated more favorably than the non-stigmatized condition were contrasted as a group with the two conditions that were rated less favorably, significant differences were again noted. However, when an individual condition was contrasted with individual conditions in its own group, no significant differences were found. This possible indication of a more favorable attitude toward the more traditionally identified handicapped groups will be discussed later.



## 2. Analysis of Verbal Immediacy

The repeated measures analysis of variance was also performed on the scores which were produced by an analysis of the non-immediate expressions contained in statements made by the subjects about the stimulus persons. The results suggested no significant differences among ratings of the six conditions, among the four levels of subjects, nor in the interaction of these two factors. These results are summarized in Table 4.2.

TABLE 4.2  
REPEATED MEASURES ANALYSIS OF VARIANCE FOR  
ANALYSIS OF IMMEDIACY SCORES

Source of Variation	Sum of Squares	d.f.	Mean Square	F.
<u>Between Subjects</u>				
A (level of training)	20.681	3	6.893	.17
Subjects within groups	1421.682	36	39.491	
<u>Within Subjects</u>				
B (Stigma conditions)	26.468	5	5.292	.41
AB	187.386	15	12.492	.98
B X Subjects within groups	2287.169	180	12.706	

## 3. Behavior Measures

The three sets of scores which resulted from the simulation of a type of behavior therapy were analyzed by means of a repeated measures analysis of variance procedure. The intensity score was the sum of the loudness levels of the noise administered by a subject to stimulus persons in each of the six conditions.

Table 4.3 summarizes the analysis of the intensity scores.





TABLE 4.3  
 REPEATED MEASURES ANALYSIS OF VARIANCE  
 FOR LEVEL OF INTENSITY SCORES

Source of Variation	Sum of Squares	d.f.	Mean Square	F.
<u>Between Subjects</u>				
A (level of training)	1257.75	3	419.25	0.31
Subjects within groups	47537.10	36	1320.47	
<u>Within Subjects</u>				
B (Stigma conditions)	289.83	5	57.96	1.49
AB	505.99	15	33.73	0.87
B X Subjects within groups	6968.49	180	38.71	

The intensity scores did not yield significant differences among the levels of training, among the six conditions, nor in the interaction of these two factors.

The results obtained from an analysis of the duration scores were quite similar to those obtained from the intensity scores. The duration score was the length of time during which the subject administered the aversive noise for the stimulus person in each condition. Table 4.4 presents the summary for this measure.

None of the F-scores obtained in this analysis reached significance at the .05 level.



TABLE 4.4  
 REPEATED MEASURES ANALYSIS OF VARIANCE  
 FOR DURATION SCORES

Source of Variation	Sum of Squares	d.f.	Mean Squares	F.
<u>Between Subjects</u>				
A (level of training)	149693.90	3	49897.97	.52
Subjects within groups	3453465.00	36	95929.57	
<u>Within Subjects</u>				
B (Stigma conditions)	29516.39	5	5903.27	1.49
AB	53333.66	15	3555.57	.89
B X Subjects within groups	712107.30	180	3956.15	

The third set of scores obtained from the "Behavior therapy" simulation was a function of the intensity score multiplied by the duration score and was labeled the total noise score. Although the F-scores obtained for factor B and for the AB interaction were slightly larger than those which were yielded by the analyses of the intensity and of the duration scores, they did not reach significance at the .05 level.

Table 4.5 reports the results of the analysis done on the total noise scores.

The results of the five attitude measures reported above did not yield significant differences among attitudes expressed by subjects at the different levels of training nor among attitudes expressed toward different types of stigmatized persons, except for the differences which resulted from the semantic differential type of rating. Table 4.6 reveals, however, the additional fact that the analyses did not yield a consistent pattern of high and low mean scores across the six conditions.



TABLE 4.5  
 REPEATED MEASURES ANALYSIS OF VARIANCE  
 FOR TOTAL NOISE SCORES

Source of Variation	Sum of Squares	d.f.	Mean Square	F.
<u>Between Subjects</u>				
A (level of training)	8165470.	3	2721823.	.50
Subjects within groups	195280500.	36	5424458.	
<u>Within Subjects</u>				
B (Stigma conditions)	1751307.	5	350261.4	2.07
AB	2530013.	15	168667.6	1.00
B X Subjects within groups	30324170.	180	168467.6	

TABLE 4.6  
 MEAN SCORES FOR SIX CONDITIONS ON  
 FIVE ATTITUDE MEASURES

	Amputation	Blindness	Addiction	Psychiatric	Mental Retardation	Control
Semantic Differential	30.30	29.85	34.80	34.40	30.77	33.55
Analysis of Immediacy	3.14	3.06	3.09	3.06	2.96	3.30
Intensity	40.64	38.30	41.22	38.42	38.85	39.25
Duration	148.77	157.37	169.22	139.27	170.40	151.32
Total noise	852.85	871.02	966.82	696.27	929.00	834.57

In a similar way, Table 4.7 reveals that subjects at the four levels of training compared to each other did not demonstrate consistently higher or lower mean attitude scores on the five measures.



TABLE 4.7  
MEAN SCORES FOR FOUR LEVELS OF TRAINING  
ON FIVE ATTITUDE MEASURES

	1st Term	2nd Term	Interns	Graduates
Semantic Differential	30.73	36.03	31.11	31.23
Analysis of Immediacy	3.06	3.05	3.26	3.03
Intensity	42.36	40.01	35.96	39.41
Duration	173.38	117.25	151.68	181.93
Total noise	928.98	631.88	752.53	1120.30

The range of possible scores for the semantic differential rating was from 11 to 77, with the higher score indicating the less favorable rating. The analysis of immediacy score theoretically has no ceiling on its range. In the present study the immediacy scores ranged from 0 to 8 non-immediate expressions in each communication unit. The intensity scores had a possible range from 0 to 150; while the duration scores could range from 0 to 300. Since the total noise score was a function of the intensity score multiplied by the duration score, its range was from 0 to 45,000.

#### 4. Disability Factor Scales

Level of training did not significantly affect attitude scores or interact significantly with disability conditions on any of the five attitude measures reported above. However, to further explore the relationship between level of training and attitudes toward disability a one-way analysis of variance was used to investigate differences between the four levels of training on each of the DFS factors. These results are reported in detail in Tables 4.8 through 4.14.





TABLE 4.8  
DIFFERENCES AMONG LEVELS OF TRAINING  
FOR THE DFS FACTOR INTERACTION STRAIN

Source	Sum of Squares	d.f.	Mean Square	F
Between groups	44.60	3	14.86	0.56
Within groups	951.40	36	26.42	
Total	996.00	39		

TABLE 4.9  
DIFFERENCES AMONG LEVELS OF TRAINING  
FOR THE DFS FACTOR REJECTION OF INTIMACY

Source	Sum of Squares	d.f.	Mean Square	F
Between groups	97.70	3	32.56	0.54
Within groups	2168.20	36	60.22	
Total	2265.90	39		

TABLE 4.10  
DIFFERENCES AMONG LEVELS OF TRAINING FOR  
THE DFS FACTOR GENERALIZED REJECTION

Source	Sum of Squares	d.f.	Mean Square	F
Between groups	26.47	3	8.82	0.57
Within groups	551.50	36	15.31	
Total	577.97	39		



TABLE 4.11

DIFFERENCES AMONG LEVELS OF TRAINING FOR  
THE DFS FACTOR AUTHORITARIAN VIRTUOUSNESS

Source	Sum of Squares	d.f.	Mean Square	F
Between groups	206.67	3	68.89	1.27
Within groups	1948.10	36	54.11	
Total	2154.77	39		

TABLE 4.12

DIFFERENCES AMONG LEVELS OF TRAINING FOR THE DFS  
FACTOR INFERRED EMOTIONAL CONSEQUENCES

Source	Sum of Square	d.f.	Mean Square	F
Between groups	149.20	3	49.73	2.71
Within groups	658.80	36	18.30	
Total	808.00	39		

TABLE 4.13

DIFFERENCES AMONG LEVELS OF TRAINING FOR  
THE DFS FACTOR DISTRESSED IDENTIFICATION

Source	Sum of Squares	d.f.	Mean Square	F
Between groups	1178.27	3	392.75	3.98*
Within groups	3547.97	36	98.54	
Total	4725.97	39		

\*Significant beyond the .05 level of confidence



TABLE 4.14

DIFFERENCES AMONG LEVELS OF TRAINING FOR THE DFS FACTOR  
IMPUTED FUNCTIONAL LIMITATIONS: EPILEPSY

Source	Sum of Squares	d.f.	Mean Square	F
Between groups	44.10	3	14.70	0.71
Within groups	737.80	36	20.49	
Total	781.90	39		

Distressed Identification was the only one of the seven factors that elicited significantly different responses from subjects at the different levels of training. The means and standard deviations of the DI scores for the subjects at different levels of training are found in Table 4.15.

TABLE 4.15

MEANS AND STANDARD DEVIATIONS OF DI  
SCORES BY LEVELS OF TRAINING

	1st Term	2nd Term	Interns	Graduates
mean	41.80	47.60	54.70	54.80
S.D.	10.25	10.33	7.15	11.45

The range of possible DI scores was from 12 to 72, with the lower score indicating the less favorable rating.

Post hoc comparisons on these mean scores indicated that the newer students in the first two terms scored significantly lower on this factor than did the graduates and interns considered as a group. A low score on this factor indicates the greater presence of this attitude dimension in the subject. The factor Distressed Identification as described by Siller



reflects a person's self-concern when confronted with disability in someone else.

Relating the results reported in this section to the hypotheses, there is some support for Hypothesis I that rehabilitation counseling students and graduates will express significantly different attitudes toward stigmatized stimulus persons than toward non-stigmatized stimulus persons. These differences were found in attitudes expressed on the semantic differential ratings but only for three types of stigmatized persons; the amputee, the blind person, and the mentally retarded person.

Hypothesis II, that differences will be found in the favorability of attitudes expressed toward different types of stigmatized stimuli was also supported by the scores obtained on the semantic differential type of rating scale. The results of the analysis of immediacy scores as well as the scores which were yielded by the simulation of a type of behavior therapy did not support this hypothesis.

Hypothesis III was confirmed by an analysis of all of the attitude measures which were used except for one of the factors of the Disability Factor Scale. Only the factor Distressed Identification yielded significant differences among the four groups as determined by level of training.

#### B. Relationship Between Rating of Counselor Effectiveness and Measures of Attitudes Toward Stigmatized Persons

The fourth hypothesis stated that favorable attitudes toward the stigmatized would relate positively to ratings of counselor effectiveness. Relating to this hypothesis, ratings of counselor effectiveness were collected on 20 of the 40 subjects. The supervisors of the subjects who were at the internship level of training, as well as the supervisors of the graduate rehabilitation counselors who participated in the study, were asked to





complete a rating on these subjects. Only three of the correlation coefficients between the rating of effectiveness and the measures of attitude reached significance at the .05 level.

The most consistent pattern was found in the relationships between the ratings of counselor effectiveness (CE) and the Disability Factor Scale scores (DFS). It should be noted that a higher CE score indicates a less favorable rating, but a higher DFS score indicates a more favorable rating. The correlation coefficients obtained for CE with each of the DFS factors were:

	Counselor Effectiveness
Interaction Strain	-.18
Rejection of Intimacy	.11
Generalized Rejection	-.30
Authoritarian Virtuousness	-.28
Inferred Emotional Consequences	-.29
Distressed Identification	-.37*
Imputed Functional Limitations	-.25

\*Significant at .05 level of confidence

Although only one of the correlations reached significance at the .05 level, they were all in the expected direction except for the correlation with the Rejection of Intimacy factor.

The ratings of counselor effectiveness were also correlated with each of the other attitude measures for each of the six conditions. Table 4.16 reports these correlation coefficients.



TABLE 4.16

CORRELATION COEFFICIENTS FOR RATINGS OF COUNSELOR EFFECTIVENESS  
WITH FIVE ATTITUDE MEASURES IN EACH OF SIX CONDITIONS

	Amputation	Blindness	Addiction	Psychiatric	Mental Retardation	Control
Semantic Differential	.14	.26	.07	.31	.19	.37*
Analysis of Immediacy	.07	-.08	-.13	.19	.37*	.03
Intensity	.08	-.13	-.11	.04	.007	-.07
Duration	.13	.21	.27	.07	.28	-.06
Total Noise	.18	.20	.25	.13	.29	.06

\* Significant at .05 level of confidence

For these attitude measures only two of the correlation coefficients were significant at the .05 level.

### C. Relationships Among the Attitude Measures

The four questions of interest which were asked in conjunction with the hypotheses were concerned with the interrelationship among the various measures of attitude. The six correlation matrices (one for each condition) which were generated yielded 291 unique correlation coefficients which relate to these questions. Fifty-eight of the 291 coefficients reached significance at the .05 level of confidence. Of the 58 significant coefficients 36 were positively correlated while 22 were negatively correlated. The largest positive correlation was .97; while the largest negative correlation was -.47. The general lack of significant correlations that were observed would seem to support the contention that the various measures of attitude used in this study were not measuring the same thing.



The 291 correlation coefficients are reported in Tables 4.17 and 4.18.

TABLE 4.17  
COEFFICIENTS FOR CORRELATIONS AMONG  
DFS FACTOR SCORES

	IS	RI	GR	AV	IEC	DI	IFL
IS		.008	.34*	.26*	.39*	.38*	.48*
RI			.39*	-.34*	-.02	-.16	.23
GR				.06	.16	.24	.31*
AV					.42*	.43*	-.08
IEC						.42*	.16
DI							.11
IFL							

\*Significant at .05 level of confidence



TABLE 4.18

CORRELATION COEFFICIENTS FOR FIVE ATTITUDE  
MEASURES AND SEVEN DFS FACTOR SCORES  
IN EACH OF SIX CONDITIONS

	Amputation	Blindness	Addiction	Psychiatric	Mentally Retarded	Control
SD/INT	.12	.14	.20	.31*	.15	.27
SD/DUR	-.31*	-.25	.03	-.14	-.26	-.16
SD/IMM	-.31*	.27*	.11	.09	-.03	.07
SD/TOT	-.25	-.14	.10	.08	-.17	.01
SD/IS	-.44*	-.33*	-.47*	-.46*	-.38*	-.34*
SD/RI	-.08	.01	.03	.02	-.14	.22
SD/GR	-.27*	-.19	-.17	-.05	-.33*	.04
SD/AV	.15	.01	.08	.08	.21	-.05
SD/IEC	-.24	-.26*	-.23	-.32*	-.24	-.23
SD/DI	-.28*	-.26*	-.20	-.18	-.23	-.18
SD/IFL	-.36*	-.37*	-.35*	-.39*	-.34*	-.22
INT/DUR	.39*	.29*	.28*	.20	.22	.34*
INT/IMM	-.27*	.31*	-.09	.01	.02	.10
INT/TOT	.52*	.51*	.44*	.48*	.47*	.54*
INT/IS	.06	.19	.08	.03	.17	.07
INT/RI	.28*	.18	.28*	.13	.14	.21
INT/GR	.16	.20	.26*	-.009	.22	.19
INT/AV	-.13	-.004	-.15	-.10	-.04	-.09
INT/IEC	-.05	.10	-.05	.003	-.03	-.09
INT/DI	.01	-.06	-.05	-.14	.01	-.02
INT/IFL	.12	-.18	.22	.03	.10	.12





TABLE 4.18--Continued

	Amputation	Blindness	Addiction	Psychiatric	Mentally Retarded	Control
DUR/IMM	.02	-.13	.04	-.02	.17	.05
DUR/TOT	.97*	.91*	.95*	.89*	.92*	.92*
DUR/IS	.03	.09	.11	.02	.09	.01
DUR/RI	.32*	.15	.21	.21	.10	.11
DUR/GR	.23	.14	.14	.03	.12	.01
DUR/AV	-.24	-.08	-.18	-.26*	-.10	-.08
DUR/IEC	-.007	-.03	-.15	.02	-.15	.09
DUR/DI	.03	.04	.008	-.11	-.01	-.04
DUR/IFL	.07	-.09	-.03	.15	-.08	.13
IMM/TOT	-.02	-.05	.05	.04	.14	.07
IMM/IS	-.01	-.16	.17	-.006	-.13	-.22
IMM/RI	-.03	.14	-.09	-.02	-.12	-.11
IMM/GR	-.01	.06	-.22	-.15	-.12	-.05
IMM/AV	-.15	-.15	.05	.11	-.06	-.08
IMM/IEC	-.10	.14	-.05	.05	-.07	-.007
IMM/DI	.01	-.007	-.17	-.06	-.06	.13
IMM/IFL	-.06	.13	.08	.07	-.25	-.02
TOT/IS	.05	.05	.10	-.01	.11	.01
TOT/RI	.33*	.14	.19	.19	.13	.15
TOT/GR	.22	.15	.14	.02	.15	.04
TOT/AV	-.25	.005	-.08	-.11	-.02	-.03
TOT/IEC	-.04	.07	-.06	.09	-.08	.09
TOT/DI	.07	.04	.06	-.08	.07	.02
TOT/IFL	.08	-.06	-.02	.07	-.06	.11



Table 4.17 reports the correlation coefficients among the DFS factor scores. Siller (1972) has reported that Interaction Strain (IS), Rejection of Intimacy (RI), Inferred Emotional Consequences (IEC), and, to a lesser degree, Generalized Rejection (GR) correlated moderately with each other ( $r$ 's .34 to .60,  $n = 772$ ). However, he found that Authoritarian Virtuousness (AV), Distressed Identification (DI), and Imputed Functional Limitations (IFL) were much more independent. The present study, dealing with a smaller and more homogeneous sample, did not reveal the same pattern reported by Siller. The IS factor did not correlate at all with RI, but did show a small and significant (.05 level) relationship with the other five factors. The RI factor correlated slightly with GR and AV, but the AV correlation was in the negative direction. GR correlated slightly, but significantly, with IS, RI, and IFL. IEC did the same with AV, DI, and IS. The three factors that Siller found to be relatively independent, AV, DI, and IFL were found to be significantly correlated with four, three, and two other factors respectively. AV was significantly related to IS, AV, and IEC; while IFL was related to IS and GR.

Questions 2, 3, and 4 related to specific relationships between explicit and implicit measures of attitudes and to relationships between measures which used the personality sketches as eliciting stimuli and those which used one-word descriptions or labels as the eliciting stimuli.

No consistent pattern was found among the correlations organized according to the type of eliciting stimulus or the explicit or implicit nature of the measuring situation. This result can be further elaborated by a look at some of the specific sets of correlation coefficients.

The highest correlations were found among the intensity scores, the duration scores, and the total scores. The correlations between the duration



scores and the total scores ranged from .89 to .97 for the six conditions; while the correlations between the intensity scores and the total scores ranged from .44 to .54 for the six conditions.

The coefficients for the correlations between the intensity scores (an explicit measure) and the duration scores (an implicit measure) are of greater interest to the present study. Across the six conditions, these correlations ranged from .20 to .39. Since four of the six correlations were statistically significant (those for amputation, blindness, addiction, and non-stigmatization), the explicit-implicit variable did not seem to differentiate responses.

A look at the correlations of other explicit measures with implicit measures revealed the following patterns. The correlation coefficients obtained for the duration scores with the semantic differential scores ranged from .03 to -.31. Only the coefficient obtained for the Amputation condition, -.31, was significant at the .05 level. Similarly, the range of correlation coefficients for the semantic differential scores with the analysis of immediacy scores was from .27 to -.31. Only two of these coefficients were significant at the .05 level, the .27 for the Blindness condition and the -.31 for Amputation.

When the analysis of immediacy scores were correlated with the intensity scores the resulting range of coefficients was from .31 to -.27 with the Blindness condition and the Amputation condition again eliciting the only two statistically significant correlations.

The Disability Factor Scale is also an explicit measuring instrument, and each factor score was correlated with the other measuring instruments. When correlated with the implicit measures, the DFS scores produced ranges of coefficients from .32 to -.26 with the Duration scores and from



.17 to -.25 with the Analysis of Immediacy scores. Once again low and only a few statistically significant correlations were discovered.

Before these results are interpreted as pointing toward a possible separation of implicit and explicit attitudes toward stigmatized persons, it is important to look at the correlations between explicit measures themselves as well as correlations between implicit measures.

When the Duration scores were correlated with the Analysis of Immediacy scores, two implicit measures, the range of coefficients obtained across the six conditions was from .17 to -.13. None of the six correlations reached statistical significance.

When the Semantic Differential scores were correlated with the Intensity scores the range of coefficients was from .12 to .31, with the Psychiatric and the Control conditions producing statistically significant correlations. The Semantic Differential scores correlated with all of the DFS factor scores resulted in a range of coefficients from .22 to -.47; while the Intensity scores correlated with the DFS scores led to coefficients ranging from .28 to -.15.

Based on the correlation coefficients which have been reported, there is no strong evidence on which to base a conclusion that explicit measures correlate more with each other than with implicit measures or that implicit measures correlate more with each other than with explicit measures.

There is also no evidence of a pattern of correlations which would relate to the type of eliciting stimulus used in the different measures.

Although the correlation coefficients are generally low and not significant, there are one or two other patterns that should be reported and discussed in the following chapter.

The DFS factors Interaction Strain (IS), Inferred Emotional Consequences (IEC), Distressed Identification (DI), Imputed Functional





Limitations (IFL) and, to a lesser extent, General Rejection (GR), demonstrated consistent negative correlations with the semantic differential ratings across all six conditions. The negative correlations were expected and point to the fact that these factors and the semantic differential ratings may be measuring the same things. The IS correlations were particularly consistent, ranging from  $-.33$  to  $-.47$ .

In Siller's previous work with the Disability Factor Scales, the Rejection of Intimacy (RI) factor was almost always closely associated with the GR, IS, and IEC factors. The results of the present study do not reflect that pattern. Although there is still some association with the GR factor, the RI factor seems independent. The RI factor also seems to be correlated more with the Intensity, Duration, and Total scores than do the other DFS factors. These correlations of RI with Intensity, Duration and Total are positive which would indicate the subjects who admitted the presence of this attitude dimension were less severe in the punishment administered in the behavioral measure. This was true to a statistically significant degree in the Amputation condition. For this condition the correlation between RI and Intensity was  $.28$ ; between RI and Duration,  $.32$ ; and between RI and Total,  $.33$ .

The Amputation condition yielded a higher number of statistically significant correlations than did any of the other five conditions. In addition, all four correlations between explicit and implicit measures for the Amputation condition reached statistical significance, with three of these four correlations being negative. The Semantic Differential correlated  $-.31$  with Duration and  $-.31$  with the Analysis of Immediacy; while Intensity correlated  $-.27$  with Analysis of Immediacy.



#### IV. DISCUSSION

One purpose of this study was to determine whether or not students in the Rehabilitation Counselor Training Program at the University of Pittsburgh as well as graduates of that program possess differential attitudes toward stigmatized and non-stigmatized persons. Hypotheses I and II relate to this aspect of the study. A second purpose was to determine whether attitudes toward stigmatized persons are different for subjects at different levels of training as rehabilitation counselors. This was the focus of Hypotheses III. The fourth hypothesis focused on another purpose of the study which was to investigate the relationship between attitudes toward stigmatized persons and ratings of counselor effectiveness. Finally there were additional questions of interest which related to the fourth purpose of the study to explore the relationships among attitude measures, in particular the relationship between verbal attitudes and overt behavior. It was felt that the findings would relate to the selection of rehabilitation counseling students, to an evaluation of the impact of counselor training programs, and to the methodology of measuring attitudes toward stigmatized persons.

This chapter will discuss the results of this study according to the purpose of the study outlined above.

##### A. The Existence of Attitudes Toward Stigmatized and Non-Stigmatized Persons

Five of the attitude measures which were used in this study--the



semantic differential type of rating, the analysis of immediacy, and the three behavioral measures--required the subjects to rate or react to a non-stigmatized control stimulus in the same manner in which they were required to rate or react to five stimuli which were characterized by five different stigmatizing conditions. Since the stigmatizing sentences and the control sentence were systematically rotated in six basic paragraphs and presented to the forty subjects in random order, the only systematic variable was the stigmatizing or the control conditions. Only one of the five measures yielded any data to support the first hypothesis that rehabilitation counseling students and graduates would express different attitudes toward stigmatized stimulus persons than toward non-stigmatized stimulus persons. Clear expressions of differential attitudes toward stigmatized persons were elicited only by the semantic differential and only toward amputees, blind persons and mentally retarded persons. The direction of the differences was interesting since these three types of stigmatized persons were rated more favorably than the non-stigmatized person.

The semantic differential data also provided support for the second hypothesis that differences would be found in the favorability of attitudes expressed toward different types of stigmatized stimulus persons. Based on the mean ratings for each condition, the order of the conditions from most favorably rated to least favorably rated was blindness, amputation, mental retardation, non-stigmatization, mental illness, and addiction. If the six conditions were to be partitioned into the three more favorably rated and the three less favorably rated, an interesting relationship can be illustrated. While each condition was not rated significantly different from the other two conditions in its own group, each condition did differ significantly from each of the three conditions in the other group.



Similarly the two groups differed significantly from each other.

The mere fact that a person is stigmatized does not elicit a uniform response. To the extent that rehabilitation counseling students and graduates do express differential ratings of stigmatized persons, these ratings are not necessarily in the same direction for different types of stigma. While the blind person, the amputee, and the mentally retarded person were rated significantly more favorably than the non-stigmatized person, the mentally ill person and the addict were rated more negatively than the non-stigmatized person, although not to a statistically significant degree.

Blindness, amputation, and mental retardation, the three conditions which were rated significantly more favorably than the non-stigmatized condition differ from the mental illness and addiction conditions in one particular way. Sometimes, there is a tendency to attach blame to the person who is stigmatized by mental illness or addiction. However, this is not usually the case with blindness, amputation, and mental retardation. Goffman (1963) suggested that one type of stigma which he described as "abominations of the body" was quite different than another type of stigma characterized as "blemishes of individual character." In the latter group Goffman included mental illness and addiction and he indicated that this type of stigma is viewed as the result of a weak will, unnatural passions, or dishonesty. In a similar vein, Farina, Holland, and Ring (1966) demonstrated that when subjects were given a set to understand why a mentally ill person may have had a "breakdown" they mitigated the punishment administered to that person. The more favorable ratings of the blindness, amputation and mental retardation conditions then, may be attributed to feelings that the stimulus persons representing those conditions were victims of the stigma and therefore treated more gently. If this is the case, however, it should be noted that even though the subjects may have been attributing





some personal blame in the case of the psychiatric stimulus and the addict stimulus, this did not result in evaluations that were significantly more negative than the rating of the non-stigmatized stimulus person.

Another explanation for the more favorable rating of the amputee, the blind person, and the mentally retarded person may be found in the basic paragraphs of the personality sketches in which the stigmatizing information was conveyed. In each of the six paragraphs, there was some reference made to the stimulus person's work training or work experience. Perhaps this information indicated to the subjects that the stimulus person had achieved at least some minimal success in his vocational plans. While this is expected of non-stigmatized persons, when it is a characteristic of persons with a physical handicap it may be an indication of special striving to overcome the handicap.

The differential rating of the more traditionally handicapped persons when compared to the rating of mentally ill persons and addicts may also reflect the fears and/or frustrations that counselors often experience when counseling with mentally ill persons and addicts. These latter two groups often seem to be characterized by counselors as unpredictable or difficult to rehabilitate, and these feelings could lead to the less favorable ratings of the mentally ill and the addicted stimuli.

While some differences did appear among the ratings of the six conditions using the semantic differential type of rating, an instrument which is subject to conscious control of responses, there were no significant differences across the six conditions in the attitude measure which resulted from the analysis of verbal immediacy, a more subtle, implicit measure. The assumption underlying the study would have predicted an opposite outcome. It was expected that rehabilitation personnel



responding to an instrument in which they were able to control their responses would have presented themselves as unbiased relative to the various types of stigma. It was further expected that these same subjects responding to a more implicit measure would have revealed differential reactions to the various stigma conditions. This was obviously not the case. It is also possible, however, that the subjects' attempts to present themselves favorably did not consist of efforts to appear unbiased and objective, rather they may have felt that the best presentation of themselves would be to rate the physically handicapped persons more favorably. If this was the case, then the susceptibility of the semantic differential rating to response distortion could be supported, while the analysis of immediacy measure could be shown to be impervious to this influence.

Even though the subjects expressed differential reactions to the various stigma types on the semantic differential type of rating, differential behaviors toward the stigma types were not expressed in the simulation of a type of behavior therapy. There were no significant differences in the total amount of the aversive noise stimulus administered to stimulus persons representing the six stigma categories. Similarly, there were no differences in the very conscious act of setting the level of intensity for the aversive noise; nor were there differences in the more subtle choice of the duration of time that the noise was administered. This lack of differential reactions to the various stigma categories on the behavioral measures may suggest that the subjects, in general, were able to use this type of behavior therapy in an objective manner with individual clients without being influenced by the type of stigma.

An alternative explanation of the lack of differential reactions across the six conditions on the behavioral measures may relate to the



nature of the behavioral tasks. During the simulation, the subject may have been focusing primarily on the task of administering the aversive noise and the characteristics of the stimulus person may have become a secondary focus and a less salient aspect of the situation.

A possible limitation to the strength of the conclusions mentioned above was suggested in the statements of some of the subjects that they had difficulty in relating to a stimulus person whom they knew only through a verbal description four sentences in length. This is a valid point that could possibly provide the basis for still another alternate explanation for the lack of differential reactions to the various stigma categories. Jaffe (1967 b) compared differential reactions of subjects to disability labels and to personality sketches and did find that the subjects reacted more favorably and with less variability toward sketches than toward labels. However, Golin (1970) concluded that it was the favorableness of the information supplied rather than the amount of information which had a significant effect upon measured attitudes toward both disabled and non-disabled stimulus persons. Guskin (1963 b) also demonstrated that even though labeling seems to have no function and little use when clearcut observational evidence is available, labels have a strong influence when there is little evidence or ambiguous evidence available. It seems, therefore, that minimal amounts of information can be useful in eliciting attitudinal responses and that the less information that is available, the more salient the stigma becomes. It should also be noted that in the present study a number of subjects afterwards discussed with the experimenter rather detailed strategies which they used based on the limited information that was available about the simulated clients. For a number of subjects the relatively short descriptions of the stimulus persons did appear to elicit genuine reactions.

... ..

... ..

... ..

... ..

... ..

... ..

... ..

... ..

... ..

... ..

## B. Level of Training and Attitudes Toward Stigmatized Persons

A second purpose of the study was to determine whether subjects at different levels of training as rehabilitation counselors would express differential attitudes toward stigmatized persons when compared to subjects at other levels. Underlying this dimension of the study was the assumption that university training programs do not have an impact on the attitudes toward stigmatized persons which are possessed by students who enroll in such programs.

The subjects of the study were beginning students in the first trimester of study, students in the second trimester, intern students who were in the fourth trimester, and graduate rehabilitation counselors who had each been working at least one year prior to the time of the present study. None of these four groups were found to differ significantly from the others on five of the attitude measures. There were no differences on the semantic differential type of rating, on the analysis of verbal immediacy, nor on the three measures resulting from the simulation of behavior therapy.

The design of the present study, since it did not include a group of subjects who were not rehabilitation counseling students or graduates, does not provide an answer to the following question: Do those persons who are accepted into the rehabilitation counseling training program already possess such positive attitudes toward stigmatized persons that further improvement on these attitudes is not likely? In considering this question, however, it should be noted that there were not group differences on the semantic differential type of rating, even though on this measure some stigmatized stimuli were rated significantly more favorably than others. This would seem to suggest that the tendency to rate the blind person, the amputee, and the mentally retarded person more favorably than the







non-stigmatized person, the mentally ill person, and the addict was characteristic of subjects at each of the four levels of training. This conclusion would lend support to the skepticism expressed by Kagan (1964) that the classroom sessions and field experiences provided in counselor education programs are not likely to alter deep-rooted attitudes and beliefs on the part of the student counselor. It must be pointed out that since the first term students in the present study had been in the program for five to six weeks before they were tested, there is the possibility that they had already picked up certain expectations and had altered their expressed attitudes accordingly. A conclusion about the impact of the training program is weak, however, unless supported by a longitudinal study of that issue. The cross-sectional design of the present study is not the most effective method of answering questions about the impact of the training program on attitudes toward stigmatized persons.

Differences were found between first and second term students when compared to advanced students and graduates on one of the attitude dimensions which were measured by the Disability Factor Scales. First and second term students considered as a group scored significantly lower than advanced students and graduates considered as a group on the factor labeled Distressed Identification. A lower score on this factor indicates a more definite presence of this attitude dimension. Siller, Ferguson, Vann, and Holland (1967) suggest that this factor involves highly personalized reactions to disability. The items are of the self-reference type, with the disabled person named as the stimulus which arouses anxiety about the respondent's own vulnerability. The respondent also expressed an active identification with the situation of the disabled person. A person with a lower score on this factor compared to a person with a higher score tends to express more agreement with items such as: "I am sometimes afraid that I will become



paralyzed"; "When I see a blind person, I try to imagine what it is like to be blind"; and "Finding out that someone has cancer makes me worry about getting it myself."

It may be that first and second trimester students exhibit the presence of Distressed Identification more than students at the internship level and graduate rehabilitation counselors merely because of the lack of sufficient exposure to disabled persons. Although first and second trimester students were involved in one or two day practicum experiences with disabled persons, interns and graduates were involved with disabled persons on a daily basis. The assumption here would be that feeling Distressed Identification in the presence of stigmatized persons is a common experience whose intensity diminishes with repeated exposures to stigmatized persons.

None of the other six attitude dimensions of the Disability Factor Scales revealed significant differences between the subjects grouped according to level of training.

#### C. Relationship Between Ratings of Counselor Effectiveness and Attitude Toward Stigmatized Persons

The present study was also concerned with the relationship between counselor effectiveness ratings of some of the subjects and the attitudes toward stigmatized persons. Only the interns and graduates were used as subjects in this part of the study, which resulted in an N of 20 for this aspect of the study.

None of the correlations obtained between ratings of counselor effectiveness and the semantic differential type of rating, the analysis of immediacy, the intensity, the duration, and the total noise score were very strong, and only two (CE with the semantic differential rating of the control stimulus, and CE with the immediacy rating of the mentally



retarded stimulus) reached statistical significance. This seems to indicate that those individuals who received the most favorable ratings as counselors, especially in the flexibility-rigidity dimension which was the focus of the counselor effectiveness instrument, generally did not respond to the attitude measuring instruments in a manner which was different than individuals who received less favorable ratings as counselors.

Of the five attitude measures mentioned above, however, the semantic differential type of rating scale did yield the most consistent relationship with the counselor effectiveness ratings. All of the correlations between the semantic differential ratings and the counselor effectiveness ratings were positive, which was the expected direction; and the range of correlation coefficients was from .07 to .37. The semantic differential type of rating is a self-report questionnaire and was expected to be susceptible to subjects' attempts to present themselves as unbiased. The semantic differential, however, did disclose differential ratings of stimulus persons stigmatized in different ways and now is shown to correlate more consistently than the other four measures with ratings of counselor effectiveness.

The Disability Factor Scale, the other explicit attitude measure used in the study, also yielded a fairly consistent correlation in the expected direction with the ratings of counselor effectiveness. Six of the seven factors yielded coefficients of correlation with the counselor effectiveness ratings which ranged from -.18 to -.37. The Distressed Identification factor which had significantly differentiated the students in the first two trimesters from the interns and graduates, was also the only DFS factor to correlate significantly (-.37) with the rating of counselor effectiveness. It was suggested that persons who indicate the presence of this attitude dimension relate disabilities that they see in others to



themselves and worry about how it would be if they had such a disability. The tendency to react this way would seem to interfere with effective counseling as the correlation between DI and Counselor Effectiveness indicates. This relationship along with the relationship between DI and level of training suggests that the DI factor may have implications for counselor selection and training.

These results suggest that individuals who receive the most favorable ratings as effective counselors do tend to express more favorable attitudes toward stigmatized persons, when these attitudes are measured by explicit attitude-measuring instruments of the self-report variety. However, favorable rating as a counselor did not appear to relate to performance on the other attitude measures used in this study.

#### D. Relationships Among Attitude Measures

In addition to investigating the existence of attitudes toward stigmatized persons among rehabilitation counseling students and graduates, the present study also related to the methodology of measuring attitudes toward stigmatized persons.

It was noted in the literature review that very little correspondence has been demonstrated to exist between verbal attitudes and overt behavior. This fact might indicate support for the "probability conceptualization" of attitude as opposed to the "latent process conceptualization" in which attitude-behavior consistency is expected. However, it is difficult to affirm this support in view of the variations in the measuring instruments and measurement situations which have been used in the studies done in this area.

The present study, therefore, included a number of attitude measures which were characteristic of some of the main variations in measuring





instruments. There were two straight-forward self-report questionnaires, the type that are considered to be susceptible to response distortion. Another "paper and pencil" measure was a more subtle measuring device which was considered less susceptible to response distortion. There were also two behavioral measures used in the study. One behavioral measure, although an indirect technique relative to attitude measurement, was open to response distortion for anyone who wanted to present himself in a particular way. The other behavioral measure was more subtle and less susceptible to response distortion.

The same eliciting stimuli, the personality sketches, were used for four of the measures, while disability labels were used to elicit subject responses on the fifth device. Ratings of stigmatized stimulus persons were compared to ratings of non-stigmatized stimulus persons to control for response sets and expressive styles. Simulated stimulus persons were used to avoid the ethical problems which are sometimes associated with the type of behavioral measures which were chosen for this study.

The responses to those various attitude measures, which were obtained under similar conditions and elicited by the same stimulus persons, were correlated with each other, and the strength of the various relationships was assessed.

The six correlation matrices which were generated (one for each condition) yielded 291 unique correlation coefficients. Of these, only 58 reached statistical significance at the .05 level, and most of the significant correlations were weak or moderate in strength. This would seem to suggest that, in general, all of the attitude measures used in this study were not measuring the same characteristics in the subjects. The design of the study assumed that this would be the case and it was suggested that explicit measures would correlate more with each other than with implicit measures



and that implicit measures would correlate more with each other than with explicit measures. Strong support was not found for these expected relationships. However, there were some patterns of relationships that are of interest.

The most consistent relationships were found among the intensity scores, the duration scores, and the total noise scores. The strong correlations between duration score and total noise scores and between intensity scores and total scores were due to the fact that total noise score was, by definition, a function of the intensity score multiplied by the duration score. However, the correlations between intensity scores and total noise scores, ranging from .44 to .54, were somewhat lower than the correlations between duration scores and total noise scores, which ranged from .89 to .97 across the six conditions. Initially this difference might be viewed as support for the suggestion made by Farina, Holland, and Ring (1966) after they discovered that the differences in the amount of pain inflicted by subjects of their study were due primarily to the use of longer rather than more intense shocks. This led Farina et al. to suggest "When someone maltreats a stigmatized individual he may not be fully aware of what he is doing since no information is given as to how long the shock was administered but the intensity is selected and hence clearly known" (Farina, Holland, and Ring, 1966, p. 427). While the results of the present study could possibly indicate support for the suggestion made by Farina et al., an alternative explanation of these results seems somewhat more plausible and must be studied further.

The alternate explanation for the higher correlation between duration scores and total scores is found in the nature of the measuring instrument itself. In setting the level of intensity, the subject could choose



one of ten possible levels. However, the duration of the button-push was measured in tenths of seconds and could last for a total of twenty seconds. While the subject had only ten levels of intensity to choose from, he theoretically had 200 duration lengths to use. It is possible, therefore, that the higher correlation between duration and total noise score in the present study is primarily the result of how the attitudes were measured and does not necessarily reflect on the expression of attitudes toward stigmatized persons.

The coefficients for the correlations between the intensity scores and the duration scores also relate to the expected differences between consciously controlled expressions of attitude and less consciously controlled expressions. Across the six conditions these correlations ranged from .20 to .39. In one sense these weak to moderate correlations might be viewed as an indication that the duration score and the intensity score were measuring different characteristics of the subjects and that consciously controlled expressions of attitude do differ from more subtle expressions. However, while an analysis of the coefficients for the correlations between other explicit measures with implicit measures revealed even weaker relationships and in some instances negative correlations, the analysis of coefficients produced when implicit measures were correlated with other implicit measures and explicit measures with explicit measures does not support the assumption that the subjects' ability to control their expressions of attitudes was the most salient characteristic of the attitude measuring situations.

The duration scores, when correlated with the semantic differential scores yielded coefficients that ranged from .03 to -.31 across the six conditions. When correlated with DFS scores, the duration scores yielded



coefficients that ranged from .32 to -.26. Similarly, the other implicit measure, the analysis of immediacy, yielded a range of coefficients from .27 to -.31 when correlated with semantic differential scores; a range from .31 to -.27 when correlated with intensity scores; and a range from .17 to -.25 when correlated with DFS scores. However, when the duration scores were correlated with the analysis of immediacy scores across the six conditions, these two implicit measures produced a range of coefficients from .17 to -.13 with none of the six correlations reaching statistical significance.

When the explicit measures were correlated with each other, the range of coefficients produced by correlations between the semantic differential and the intensity scores was from .12 to .31; between the semantic differential and the DFS factors from .22 to -.47; and between the DFS factors and the intensity scores from .28 to -.15.

In view of the type of relationships that were discovered to exist among most of the attitude measures, it is necessary to go back to the range of correlation coefficients between the duration and intensity scores and explain why this range seemed to be higher and more consistent than the others. What these two measures shared that was somewhat different from the others was that, while the subject was responding to this measure, the experimenter was sitting next to the subject and very closely observing his actions. For the other measures, the subject was working alone in a separate room on a form that was identified only by a number and with the pledge that his anonymity would be assured. It is possible that under the scrutiny of the experimenter the subject was more careful about all of his responses even about those that were given in response to subtle measures. But when he was working privately in a separate room, the subject may have





been inclined to respond more spontaneously, leading to some of the statistically significant differences that were yielded by the semantic differential type of measure and by the Disability Factor Scales. If this is the case, then it would appear that environmental factors may be as important as the design of the individual measures in encouraging or discouraging controlled responses in attitude measuring situations. This would support the suggestion by Wicker (1969) that a wide range of personal and situational factors contribute to the variance in overt behaviors in attitude measuring situations. Similarly, this result would suggest support for the conclusions of Sloat and Frankel (1972) who suggested that persons do not have a general attitude toward persons with a disability independent of the context.

There was some evidence that some of the factors of the Disability Factor Scale were measuring characteristics similar to those that were tapped by the semantic differential type of rating. The DFS factors Interaction Strain (IS), Inferred Emotional Consequences (IEC), Distressed Identification (DI), and Imputed Functional Limitations (IFL) yielded coefficients of correlation with the semantic differential ratings which ranged from  $-.18$  to  $-.47$ . The negative correlations in this instance indicated that the subjects who exhibited the stronger presence of these attitude dimensions also expressed more negative ratings on the semantic differential scales.

The correlations were the highest and most consistent between the Interaction Strain factor and the semantic differential type of rating. This means that subjects who showed the strongest tendency to agree with items such as, "I feel uneasy when I'm near someone missing an arm or leg" or "I would feel nervous with a blind person because a lot of the time I wouldn't know the right thing to do" or "I would rather be dead than



paralyzed" these subjects also tended to rate stimulus persons more negatively on the semantic differential type of rating. It is important to point out, however, that these correlations were found with ratings of both stigmatized and non-stigmatized stimuli and perhaps reflect a characteristic of the subjects that is more general than attitudes toward stigmatized persons.

In Siller's previous work with the Disability Factor Scales, the Rejection of Intimacy (RI) factor was almost always closely associated with the GR, IS, and IEC factors. While this pattern did not appear in the present study, the RI factor was shown to produce positive coefficients when correlated with the intensity, duration, and total noise scores. These coefficients ranged from .10 to .33, and they were consistently in the positive direction. A positive correlation in this instance indicated that subjects who agreed with items such as "I would never adopt a child who is paralyzed" or "I don't think that I could fall in love with a person who is a hunchback" or "Even if I fell in love with someone who is deaf, I don't think I would marry him (her)," these subjects were less severe in the amount of noise administered in the behavioral measures. One explanation of this trend may be that subjects who expressed a reluctance to become involved in an intimate way with stigmatized persons also were reluctant to become involved enough with the stimulus persons in order to make the aversive conditioning effective. As a second explanation, it was noted that several of the subjects were critical of the wording of the items of this factor as they discussed the procedures afterwards. Several subjects felt uncomfortable in responding to an item such as "I would never adopt a child who is paralyzed" because they felt that they may not want to adopt any child regardless of whether or not it was paralyzed. Similarly they were uncomfortable about responding to an item



such as "Even if I fell in love with a person who has cancer, I don't think I would marry him" because they felt that the available responses did not allow them to differentiate between their feelings toward a person who has cancer and their feelings toward marriage in general. It seems that the RI factor was picking up on more than attitudes toward the disabled, and this may be responsible for the unusual pattern of relationships with the RI factor.

The correlation coefficients between the RI factor and the intensity, duration, and total scores were particularly high in the amputation condition, where each one reached statistical significance. This was one of several facts which suggest that future study on attitudes of professionals toward amputees may be particularly fruitful. The amputation condition yielded a higher number of statistically significant correlation coefficients than did any of the other five conditions. All four correlations between an explicit and an implicit measure (semantic differential/immediacy, intensity/immediacy, semantic differential/duration, and intensity/duration) for the amputation condition reached statistical significance, and three of the four coefficients were in the negative direction, indicating the expression of conflicting attitudes on the different measures. These results could point to the possibility that conscious attitudes toward amputees are different than less conscious attitudes.

The results obtained from the analysis of immediacy measure did not appear to relate to the other measures used in this study. One explanation may be related to the confusion that the subjects experienced after reading the directions for the analysis of immediacy measure. Many subjects asked for clarification of the directions and they also seemed rather suspicious of the reason for the task. It would seem that this measure is more



effective whenever the statements which are scored are elicited under more natural circumstances. The forced nature of the attitude measuring situation did not encourage the free statements that would probably contain more natural verbal expressions.

In summary, it appears that, according to expectations, there were not consistent relationships among the various attitude measures in spite of the similarity in the eliciting stimuli used for four of the measures, and in spite of the fact that the various measures were administered at the same session and in generally the same context. However, there was no strong support for the assumption that there would be direct relationships among measures that seemed to be open to response distortions when correlated with each other and among measures that were more subtle when they were correlated with each other. Nor did inverse relationships generally appear when explicit and implicit measures were correlated with each other.

The relationships that did appear seemed to support the general conclusions of some other studies that attitudes toward stigmatized persons as expressed in measuring situations are multidimensional and influenced by situational factors and the wording of survey items as well as by the types of stigmatization.





## V. CONCLUSIONS AND IMPLICATIONS

### A. Conclusions

The first two hypotheses gave rise to the first three conclusions.

1. Rehabilitation counseling students and graduates did not express different attitudes toward stigmatized persons than toward non-stigmatized persons on the analysis of verbal immediacy or on the measures of attitude elicited through the simulation of a type of behavior therapy.

2. Rehabilitation counseling students and graduates did express significantly more favorable attitudes toward amputees, blind persons, and mentally retarded persons than toward non-stigmatized persons, mentally ill persons, and addicts whenever these attitudes were measured by a semantic differential type of rating.

3. Even though the rehabilitation counseling students and graduates rated some types of clients more favorably than others on the semantic differential, there were not significant differences in the administration of the aversive noise during the simulation of a type of behavior therapy.

The testing of the third hypothesis resulted in two additional conclusions.

4. Rehabilitation counseling students and graduates grouped according to level of training did not differ in the attitudes toward stigmatized persons expressed on the semantic differential type of rating, the analysis of verbal immediacy, the behavioral measures, and on six of the seven factors of the Disability Factors Scale.



5. Newer students in rehabilitation counseling did differ from advanced students and graduates in the degree to which they revealed the presence of the attitude dimension Distressed Identification.

6. There were not consistent correlations between ratings of counselor effectiveness and the attitudes toward stigmatized persons expressed on the various measures.

7. Ratings of counselor effectiveness did correlate significantly with the DFS factor Distressed Identification.

The remaining conclusions resulted from the investigation of the research questions dealing with the relationships among the attitude measures.

8. In general, consistent relationships were not found to exist among the various attitude measures used in this study.

9. Consistent relationships also did not appear when the attitude measures were grouped according to whether the measures were implicit or explicit in form.

10. The attitudes toward stigmatized persons expressed in the various attitude measuring situations are affected by general characteristics of the persons and by the context in which they are elicited.

#### B. Implications of the Study and Directions for Future Research

One purpose of the study was to take a look at the attitudes toward stigmatized persons expressed by students who were participating in a rehabilitation counselor training program and by graduates of that program. It was discovered that generally this group of subjects did not systematically discriminate between stigmatized and non-stigmatized persons on the measures used in the study. One possible implication of this finding is that only persons who are able to treat stigmatized persons in the same way that they



treat non-stigmatized persons ever apply to and enter this type of training.

However, previous studies by Ellsworth (1965), Williams (1969), and Schofield and Kunce (1971) suggest that rehabilitation professionals do treat some stigmatized persons differently and do express certain biases in their day-to-day decisions. These studies, however, do not indicate whether the subjects were university trained persons with professional degrees or whether they were agency trained persons. The findings of the present study may only relate to those rehabilitation personnel who enter the field through the university programs where the entrance requirements are considered more stringent and where personal interviews are required in addition to quantitative data. Future research should compare the attitudes toward stigmatized persons possessed by rehabilitation personnel who enter the field through university training programs to the attitudes possessed by persons who are selected and trained by private agencies or by civil service facilities.

Even though the rehabilitation counseling students did not discriminate against stigmatized persons as a group, there was an indication of favorable treatment for some types of stigmatized persons when compared to other types and to non-stigmatized persons. This favorable rating did not lead to differential application of the aversive noise in the present study, but the implication is that rehabilitation counseling students and graduates may treat amputees, blind persons, and mentally retarded persons more favorably than mentally ill persons, addicts and non-stigmatized persons. If such favorable ratings or treatments do occur, then the impact of this type of bias on the rehabilitation situation must also be investigated and rehabilitation personnel should be aware of the existence and



the effect of this type of positive bias. This type of bias may be shown to reflect an unrealistically positive attitude on the part of the rehabilitation professional which could be detrimental to successful rehabilitation. It is also possible that a positive bias may be a necessary attitude if the rehabilitation person is to maintain his enthusiasm for his work.

The fact that subjects at the four levels of training did not differ significantly from each other on the attitudes measured implies that participation in this type of program does not have an impact on the attitudes of students who participate in it. A longitudinal study of the impact of rehabilitation counselor training on persons who enter this field is necessary to more definitely answer this question.

The fact that consistent correlations were not found between the favorability of attitudes and ratings of counselor effectiveness raises the question of whether or not it makes any difference to one's effectiveness as a counselor if a counselor does possess negative attitudes toward stigmatized persons. Much additional research will have to be done on this point in view of the multidimensional nature of both attitudes toward stigmatized persons and of counselor effectiveness. Although the present study did investigate several dimensions of counselor attitudes toward stigmatized persons, the rating of counselor effectiveness measure focused primarily on the flexibility-rigidity dimension. Future research should examine the relationships between attitudes toward stigmatized persons and the decisions made by counselors, the growth and movement of the stigmatized client during counseling, ratings of counselor effectiveness done by stigmatized clients, and other dimensions as well.

One of the most dominant implications of the present study is that





attitudes toward stigmatized persons are, indeed, multidimensional in nature. This then lends support to the probability conceptualization of attitude as expressed by Fuson (1942) and by Campbell (1950; 1963). Campbell (1963) suggested that a latent acquired behavioral disposition or attitude mediates both verbal and overt behavioral responses, but that the way the attitude is manifested depends upon certain situational pressures. Future research relative to the impact of attitudes toward stigmatized persons possessed by rehabilitation personnel on the rehabilitation situation should, following Campbell's general suggestion, attempt to empirically specify situational thresholds for rehabilitation personnel in which their attitudes toward stigmatized persons would become a salient factor in the actions taken.

One final implication of the present study would support an opinion offered by Scott (1968) who stated that attempts to study attitudes by indirect methods are likely to encounter more confounding variables than they circumvent. The self-report type measures used in the present study seemed to reveal more about the attitudes of the subjects than did the indirect measuring instruments. Also the self-report measures related more consistently to the ratings of counselor effectiveness and to each other than did the other types of measures. Future research in this area, then, should pursue the conclusion offered by Scott, "Given the relative difficulty of constructing and administering indirect instruments, it would seem desirable to ascertain first whether or not more convenient direct methods are sufficiently valid for the purpose" (Scott, 1968, p. 242).



## VI. SUMMARY

The present study investigated attitudes toward stigmatized persons among students in a rehabilitation counselor training program and graduates of that program. The hypotheses related to attitudes toward stigmatized persons compared to attitudes toward non-stigmatized persons, differences in attitudes toward different types of stigmatized persons, differences in attitudes among subjects at different levels of training, the relationship between attitudes toward stigmatized persons and ratings of counselor effectiveness, and the relationships among the various attitude measures.

The subjects for the study included thirty students from three levels of training in the Rehabilitation Counseling Program at the University of Pittsburgh and ten graduates of that program who were working as rehabilitation counselors. All subjects were individually administered three written attitude measures, including a semantic differential type of rating, an analysis of verbal immediacy and the Disability Factors Scale. All subjects also participated as counselors in a simulation of the use of a type of behavior therapy which yielded three behavioral indicators of attitudes toward stigmatized persons. Also ratings of counselor effectiveness were done on half of the subjects.

Repeated measures analyses of variance done on four of the attitude measures revealed no significant differences in attitudes toward stigmatized persons when compared to attitudes toward non-stigmatized persons. The analysis of the semantic differential scores did indicate that subjects



rated the amputee, the blind person, and the mentally retarded person significantly more favorably than the addict, the mentally ill person, and the non-stigmatized person. This pattern of differential ratings did not appear on the other written measure of attitude nor on the behavioral measures. The repeated measures analyses of variance also revealed no significant differences among attitudes expressed by subjects at the four levels of training except on the DFS factor labeled Distressed Identification. Correlation coefficients between the attitude measures and the ratings of counselor effectiveness did not reveal consistent relationships between those two variables, except for the correlations between counselor effectiveness and the DFS factor Distressed Identification. Relating to the methodology of measuring attitudes toward the stigmatized, correlation coefficients among the various measures were generally low. Grouping the measures according to the explicit or implicit nature of the measuring instrument also did not yield consistent relationships. The relationships that did emerge tended to support the concept that attitudes are multidimensional and that their expression are affected by the instruments used, by the situational context and by general characteristics of the subjects.

It was concluded from this study that the rehabilitation counseling students and graduates were generally objective in their ratings. The differences that were discovered involved rating some types of stigmatized persons more favorably than non-stigmatized persons but there was little indication of negative ratings of stigmatized persons. It was further concluded that counselors at different levels of training do not differ significantly in attitudes expressed and that ratings of counselor effectiveness in rehabilitation settings do not necessarily relate to attitudes toward



stigmatized persons. And it was also concluded that the various measures that were used were tapping different dimensions of a multidimensional concept, the measurement of which is also affected by aspects of the measuring instruments and the measurement context.

The implications of the present study are first, that there is little evidence of negative attitudes toward stigmatized persons among students of the Rehabilitation Counselor Training Program used in this study. Secondly, to the extent that some significantly favorable ratings were made of some types of stigmatized persons, the impact of this type of positive bias on the rehabilitation situation also has to be investigated. Third, a more complete study should be done on the relationship between attitudes toward stigmatized persons and ratings of counselor effectiveness that would consider the multidimensional nature of both concepts. Fourth, the multidimensional nature of attitudes toward stigmatized persons must also be recognized in any effort to develop selection criteria for rehabilitation counselors and in studying the impact of these attitudes on the rehabilitation setting. And, finally, further study of the usefulness of the self-report type of attitude measures should be carried out before further effort is expended on the development of indirect measurement techniques.





## **APPENDICES**



# APPENDIX A

## OPINIONS ABOUT THE DISABLED

### Instructions:

On the following pages you will find statements of ideas and attitudes about disabled people. There are many different opinions about this subject. People agree with some of these statements and disagree with others. We would like to know what you think about each one. There are no right or wrong answers: we are interested only in your opinions. Please make a choice for every statement.

At the right of each statement are six choices as follows:

1	2	3	4	5	6
Strongly	Agree	Not sure but	Not sure but	Disagree	Strongly
agree		tend to agree	tend to disagree		disagree

Please put a circle around the choice that comes closest to how you feel about the statement. For example, if you Strongly agree with a statement, circle (1); if you are Not sure but tend to disagree, circle (4). It is very important that you answer every item.

- |   |     |   |   |   |   |   |   |
|---|-----|---|---|---|---|---|---|
| I feel uneasy when I'm near someone missing an arm or leg.                            | 1:  | 1 | 2 | 3 | 4 | 5 | 6 |
| I would never adopt a child who is paralyzed.   | 2:  | 1 | 2 | 3 | 4 | 5 | 6 |
| People with cancer ought to be kept apart from the normal community.                  | 3:  | 1 | 2 | 3 | 4 | 5 | 6 |
| Blind people have unusually good memories.  | 4:  | 1 | 2 | 3 | 4 | 5 | 6 |
| Deaf people are usually suspicious.   | 5:  | 1 | 2 | 3 | 4 | 5 | 6 |
| Sometimes I worry about getting heart trouble myself.                                 | 6:  | 1 | 2 | 3 | 4 | 5 | 6 |
| I think if I became blind I could make a pretty good adjustment.                      | 7:  | 1 | 2 | 3 | 4 | 5 | 6 |
| Hunchbacks are as capable as anyone else.   | 8:  | 1 | 2 | 3 | 4 | 5 | 6 |
| I would be unhappy if a friend of mine thought of marrying a person who has epilepsy. | 9:  | 1 | 2 | 3 | 4 | 5 | 6 |
| There should be laws against marriage between two amputees.                           | 10: | 1 | 2 | 3 | 4 | 5 | 6 |



1 Strongly agree	2 Agree	3 Not sure but tend to agree	4 Not sure but tend to disagree	5 Disagree	6 Strongly disagree	
People who are paralyzed tend to develop special intellectual gifts.	11:	1	2	3	4	5 6
People with cancer are often angry at the world.	12:	1	2	3	4	5 6
Sometimes I am afraid of getting badly scarred.	13:	1	2	3	4	5 6
I would feel nervous with a blind person because a lot of the time I wouldn't know the right thing to do.	14:	1	2	3	4	5 6
People with epilepsy can do most things as well as anyone else.	15:	1	2	3	4	5 6
I would be unhappy if a friend of mine thought of marrying a person with a bad heart.	16:	1	2	3	4	5 6
It would be better for deaf people if they didn't try to talk.	17:	1	2	3	4	5 6
When I see a blind person, I try to imagine what it is like to be blind.	18:	1	2	3	4	5 6
Most people who are paralyzed feel bitter.	19:	1	2	3	4	5 6
I would never vote for a person for President if he had bad scars on his face.	20:	1	2	3	4	5 6
If I were missing an arm or leg I would feel like hiding and avoiding people.	21:	1	2	3	4	5 6
People with epilepsy are probably closer to the really important things in life.	22:	1	2	3	4	5 6
I would never adopt a child who is blind.	23:	1	2	3	4	5 6
Paralyzed people are best off staying among themselves.	24:	1	2	3	4	5 6
People with heart trouble feel sorry for themselves.	25:	1	2	3	4	5 6
Finding out that someone has cancer makes me worry about getting it myself.	26:	1	2	3	4	5 6



1	2	3	4	5	6		
Strongly agree	Agree	Not sure but tend to agree	Not sure but tend to disagree	Disagree	Strongly disagree		
If I were a hunchback I would feel like hiding and avoiding people.	27:	1	2	3	4	5	6
A child who has epilepsy can, with proper drugs, function as well as a normal child.	28:	1	2	3	4	5	6
Deafness often improves a person's character.	29:	1	2	3	4	5	6
I would be upset if a child of mine dated a person with bad facial scars.	30:	1	2	3	4	5	6
It's probably silly, but I can't help connecting amputation with bad character.	31:	1	2	3	4	5	6
Many people with heart trouble use their condition to take advantage of others.	32:	1	2	3	4	5	6
Meeting a deaf person makes me worry about unpleasant things that could happen to me.	33:	1	2	3	4	5	6
I would rather be dead than be paralyzed.	34:	1	2	3	4	5	6
Blind people and normal people can't really understand each other.	35:	1	2	3	4	5	6
A person missing an arm or leg can function very well with an artificial limb.	36:	1	2	3	4	5	6
Children with heart trouble are usually more friendly than other children.	37:	1	2	3	4	5	6
Even if I fall in love with a person who has cancer, I don't think I would marry him (her).	38:	1	2	3	4	5	6
I feel that a person with a hunchback must have done something to deserve it.	39:	1	2	3	4	5	6
Blind people tend to be irritable.	40:	1	2	3	4	5	6
If I lost an arm or leg, I think I could make a good adjustment.	41:	1	2	3	4	5	6
I get nervous about my own health when I hear about someone who has cancer.	42:	1	2	3	4	5	6
People with epilepsy are just as intelligent as normal people.	43:	1	2	3	4	5	6





1	2	3	4	5	6		
Strongly agree	Agree	Not sure but tend to agree	Not sure but tend to disagree	Disagree	Strongly disagree		
When I know a child is deaf, I feel especially warm toward him.	44:	1	2	3	4	5	6
I don't think I could fall in love with a person who is a hunchback.	45:	1	2	3	4	5	6
Because a blind person can't see me, he could never really know me.	46:	1	2	3	4	5	6
Meeting someone with heart trouble makes me worry about something being wrong with me.	47:	1	2	3	4	5	6
If I introduced a paralyzed person to my friends, I think they would feel uneasy.	48:	1	2	3	4	5	6
Because of their condition, people with cancer are probably closer to the really important things in life.	49:	1	2	3	4	5	6
Seeing a blind person makes me realize how easily I could lose my sight.	50:	1	2	3	4	5	6
I wouldn't let myself fall in love with a person who is missing a limb.	51:	1	2	3	4	5	6
Deaf people are best off staying among themselves.	52:	1	2	3	4	5	6
Blind people get a truer first impression of others than most people do.	53:	1	2	3	4	5	6
When I meet a person with epilepsy I try to imagine what it is like.	54:	1	2	3	4	5	6
I think if I became paralyzed I would make a pretty good adjustment.	55:	1	2	3	4	5	6
With today's drugs, epilepsy is not a serious condition.	56:	1	2	3	4	5	6
When I see an amputee I can't help thinking how it must feel to have a stump.	57:	1	2	3	4	5	6
I would date a blind person as readily as I would anyone else.	58:	1	2	3	4	5	6
There must be something the matter with someone who marries a person with heart trouble.	59:	1	2	3	4	5	6



1	2	3	4	5	6		
Strongly agree	Agree	Not sure but tend to agree	Not sure but tend to disagree	Disagree	Strongly Disagree		
A person who is paralyzed can understand people better than someone who isn't.	60:	1	2	3	4	5	6
I am sometimes afraid of losing an arm or leg.	61:	1	2	3	4	5	6
Even if I fall in love with someone who is deaf, I don't think I would marry him (her).	62:	1	2	3	4	5	6
People with bad facial scars are often resentful.	63:	1	2	3	4	5	6
Paralyzed people ought to be kept apart from the normal community.	64:	1	2	3	4	5	6
I don't think of a person with epilepsy as being disabled.	65:	1	2	3	4	5	6
I would rather have no children than a child who is a hunchback.	66:	1	2	3	4	5	6
Amputees tend to develop special intellectual gifts.	67:	1	2	3	4	5	6
I am sometimes afraid that I will become paralyzed.	68:	1	2	3	4	5	6
Most amputees are angry at the world.	69:	1	2	3	4	5	6



## APPENDIX B

### EXAMPLES OF VERBAL IMMEDIACY AND SEMANTIC DIFFERENTIAL MEASURES

Joe Thomas is 22 years old and has recently completed a vocational training program. He was born and raised in Cleveland and was the oldest in a family of four boys. He is an amputee and is confined to a wheelchair. He presently lives alone in an apartment near the University.

Write a short statement, a sentence or two, about yourself and the person described above.

Please rate the person described above on each of the following scales. Place a check mark closer to one end of the scale or the other according to the end of the scale that you feel is most characteristic of this person. If you consider this person to be neutral on the scale, then you should place your check mark in the middle space. Please check every scale and make your judgements based upon what these adjectives mean to you.

Worthless										Valuable
Dirty										Clean
Tasteful										Distasteful
Warm										Cold
Deep										Shallow
Hard to get along with										Easy to get along with
Dependent										Self-reliant
Reliable										Unreliable
Sloppy										Neat
Not dangerous										Dangerous
Unemployable										Employable

Please go back and make certain that you have checked every scale.



## APPENDIX C

### STIMULUS INFORMATION

#### Basic Personality Sketches

Joe Thomas is 22 years old and has recently completed a vocational training program. He was born and raised in Cleveland and was the oldest in a family of four boys. He presently lives alone in an apartment near the University.

Harry Davis was the only child of parents who still live in a suburb of Philadelphia. He is 20 years old and his previous work experience was limited to summer employment. He enjoys modern music and jazz.

Tom Jordan shares an apartment with two friends in a small city near Buffalo. He is 21 years old and has a younger brother and an older sister both of whom still live at home. During his last two years of school he was enrolled in a work preparation program.

John Brooks is 21 years old and has had limited work experience. He enjoys attending sporting events and listening to the radio. He has lived in Pittsburgh since he was 5 years old.

Bob Gordon is 22 years old and has recently completed an on-the-job training program. He was born in Morgantown and has two older sisters. He presently lives in a boarding house near the downtown section of the city.

Steve Hunter lives with his parents and older brother in a small town in central Pennsylvania. He is 20 years old and has had limited work experience. He enjoys playing cards with his brother and friends.

#### Stigmatizing Sentences

- A. He is an amputee and is confined to a wheelchair.
- B. He has been totally blind from birth.
- C. He was at one time a client in a treatment program for drug addicts.
- D. He had been previously hospitalized for psychiatric treatment.
- E. During his school years he was a student in the special classes for the mentally retarded.
- F. He is unmarried and dates occasionally.





## APPENDIX D

### Counselor Effectiveness Rating Scale

Each of the following ten scales contain two short descriptions of counselor behavior that represent opposite points of a continuum. To the extent that the description on the left side of the page is more characteristic of the counselor who is being rated, circle the numbers 1, 2, or 3 depending upon whether the counselor always (1), usually (2), or occasionally (3) demonstrates this behavior. To the extent that the description on the right side of the page is more characteristic of the counselor who is being rated, circle the numbers 5, 6, or 7 depending upon whether the counselor always (7), usually (6), or occasionally (5) demonstrates this behavior. If you feel that the person is neutral on one of the scales, please circle the number 4 for that scale.

#### I. Counseling Behavior

- (A) Counselor effectively collaborates with clients explores and examines with clients

Counselor emphasizes early closure on presenting problems. Explores very little or not at all with client

1                      2                      3                      4                      5                      6                      7

- (B) Counselor focuses on the client's perspective

Counselor gathers information for its own sake

1                      2                      3                      4                      5                      6                      7

- (C) Counselor possesses and uses flexible responses. Possesses effective repertoires for responding to feelings, content and process whenever each is appropriate

Counselor possesses and uses a rigid set of responses. Appears straight-jacketed in one response mode

1                      2                      3                      4                      5                      6                      7

- (D) Counselor is professionally objective and works within the limits of role as counselor

Counselor becomes overinvolved with clients and exhibits rescue or adoption fantasies; or communicates excessive distance to client, appearing reserved or wooden

1                      2                      3                      4                      5                      6                      7

- (E) Counselor can handle unexpected situations during counseling such as sudden shifts in affect, mood or topic or interruptions from outside

Counselor gets confused in unexpected situations. Seems trapped; appears not to know what to do; or flounders

1                      2                      3                      4                      5                      6                      7



- (F) Interruptions or suggestions of alternative perceptions, if used by the counselor, remain close to client's level of awareness

1                      2                      3                      4

Interpretations and suggestions of alternative perceptions appear to be an exercise of the counselor's intellectual prowess, instead of a real communication to the client

5                      6                      7

## II. Response to Supervision

- (A) Counselor listens to supervisor and considers supervisor's viewpoint

1                      2                      3                      4

Counselor appears not to hear supervisor or doggedly defends his initial position

5                      6                      7

- (B) Counselor accurately appreciates the dynamic complexities of the psychological processes within clients. Is able to communicate to supervisor the client's areas of strength as well as weakness

1                      2                      3                      4

Counselor communicates a naive or simplistic grasp of the client's dynamics or engages in a "bookish" labeling of categories

5                      6                      7

- (C) Counselor consults appropriately with other professionals when obtaining and releasing information about the client

1                      2                      3                      4

Counselor obtains or provides either too much or too little information when dealing with other professionals about the client

5                      6                      7

- (D) Counselor seems committed to counseling as a career and to improving himself as a counselor

1                      2                      3                      4

Counselor gives evidence of little commitment or personal involvement in counseling as a career

5                      6                      7

Please note that for the overall rating scale the central point is also anchored by a descriptor of counselor effectiveness to assist you in making a more discriminating rating. Please circle the number which represents this counselor's position on this scale.



## III. Overall rating

Extremely effective  
in work with clients;  
approaches "ideal"

Adequate competence;  
some shortcomings but  
generally responsive  
to clients

Negative effectiveness  
in work with clients;  
does more harm than  
good

1      2      3      4      5      6      7      8      9      10      11



# APPENDIX E

## RAW SCORES FOR 40 SUBJECTS ON SIX ATTITUDE MEASURES AND 20 SUBJECTS ON RATING OF COUNSELOR EFFECTIVENESS

Subjects 1-10 First trimester  
Subjects 11-20 Second trimester  
Subjects 21-30 Interns  
Subjects 31-40 Graduates

### Semantic Differential Scores

Subjects	Amputation	Blindness	Addiction	Psychiatric	Mental Retardation	Control
1	17	18	32	27	25	26
2	42	33	44	41	43	36
3	47	45	45	44	46	44
4	25	26	26	26	26	27
5	30	30	29	35	32	39
6	43	42	49	44	43	43
7	15	11	19	17	24	14
8	30	33	33	31	25	30
9	25	17	31	25	24	20
10	24	24	35	28	21	18
11	30	26	32	34	34	24
12	38	35	38	38	35	35
13	38	33	47	43	28	31
14	36	23	31	48	32	41
15	39	41	41	42	40	41
16	38	32	40	32	36	35
17	44	44	44	45	45	44
18	39	39	36	38	35	40
19	27	28	28	28	29	29
20	33	37	35	38	34	36
21	18	11	22	19	21	30
22	27	26	34	34	35	31
23	25	44	31	38	24	45
24	32	42	40	45	28	40
25	11	11	17	17	17	11
26	35	37	42	41	38	37
27	40	40	38	41	44	38
28	40	37	43	41	42	36
29	23	30	34	31	21	34
30	26	21	27	24	35	26
31	36	42	47	47	32	50
32	19	15	43	26	18	22
33	11	14	19	26	15	44
34	41	41	41	41	41	41
35	23	25	21	20	21	36
36	38	40	40	40	40	40
37	38	23	43	49	32	45
38	11	11	13	11	11	11
39	18	27	39	41	23	34
40	40	40	43	40	37	38





Analysis of Verbal Immediacy Scores

Subjects	Amputation	Blindness	Addiction	Psychiatric	Mental Retardation	Control
1	3.0	2.0	2.2	0.5	2.5	2.0
2	4.0	2.5	4.0	2.8	2.5	1.5
3	1.0	6.0	1.5	6.0	2.5	2.5
4	3.5	2.3	2.7	3.2	4.0	2.7
5	2.0	4.2	1.5	2.0	2.0	4.0
6	3.0	2.3	2.5	2.0	1.3	4.5
7	3.5	3.5	3.8	2.6	2.5	3.6
8	5.5	5.3	4.5	5.0	3.8	4.8
9	2.5	2.3	2.3	4.5	2.5	1.5
10	3.5	4.3	3.0	3.3	4.0	3.3
11	4.0	3.5	2.5	4.2	6.7	6.5
12	1.5	2.5	1.5	1.5	2.0	2.5
13	4.8	4.5	3.7	4.0	4.7	8.0
14	3.0	2.0	2.0	2.0	2.5	3.0
15	2.6	2.1	3.0	1.8	4.0	1.5
16	3.0	2.0	5.5	6.0	3.0	3.5
17	2.3	2.0	2.0	2.8	2.3	1.5
18	2.5	3.2	4.2	3.5	2.8	3.2
19	2.5	2.2	3.2	3.0	3.3	3.3
20	1.0	1.0	5.5	2.0	2.0	1.0
21	1.5	3.3	4.0	3.8	1.5	2.0
22	5.0	4.0	2.5	3.2	3.2	3.0
23	2.0	5.0	2.5	2.2	4.5	5.5
24	3.6	3.2	2.5	2.5	3.8	5.0
25	3.0	2.5	2.8	2.8	2.2	4.0
26	3.7	3.0	2.6	2.6	2.2	2.4
27	3.2	3.5	3.0	3.5	3.0	3.5
28	2.5	5.0	5.5	5.5	3.0	5.5
29	4.0	2.5	8.5	2.0	4.0	2.5
30	1.0	1.5	1.0	3.5	2.7	3.0
31	4.1	4.0	2.8	2.8	3.8	3.8
32	3.3	3.6	2.0	3.0	3.0	2.6
33	6.5	2.5	2.3	2.3	2.3	2.0
34	2.0	3.0	2.0	2.0	2.0	5.0
35	3.6	3.8	3.5	3.3	2.4	3.8
36	3.1	3.0	2.8	2.8	2.5	2.5
37	2.0	3.3	4.0	4.0	3.5	4.3
38	2.5	1.0	1.5	1.0	1.0	1.5
39	7.5	2.0	2.5	3.5	4.0	2.5
40	3.0	3.3	4.5	3.5	3.0	3.5

Level of Intensity Scores

1	57	52	53	47	45	46
2	16	21	24	16	20	21
3	60	60	62	60	61	60
4	26	27	26	26	27	26
5	50	48	46	42	46	44
6	44	48	42	46	48	48
7	48	45	46	40	28	29
8	52	52	48	52	49	44



Subjects	Amputation	Blindness	Addiction	Psychiatric	Mental Retardation	Control
9	39	42	39	39	29	39
10	45	48	49	46	56	46
11	27	31	20	27	31	30
12	61	47	68	67	67	53
13	33	26	34	29	34	31
14	37	34	61	36	54	37
15	39	41	41	42	41	41
16	14	14	16	13	11	14
17	34	22	26	25	23	27
18	47	52	47	51	41	46
19	49	52	61	62	56	63
20	54	52	50	51	43	55
21	59	24	51	36	38	33
22	57	57	55	56	50	57
23	47	50	50	50	50	47
24	29	28	32	27	23	40
25	37	23	29	8	33	26
26	17	25	25	11	25	12
27	60	29	26	67	35	39
28	34	34	35	36	32	32
29	24	36	38	34	38	38
30	36	28	30	29	25	26
31	37	24	40	38	30	49
32	51	54	57	36	35	62
33	16	24	24	20	24	24
34	65	70	71	68	68	68
35	28	31	34	34	39	28
36	31	31	40	26	40	24
37	70	72	71	74	70	73
38	8	8	8	8	8	8
39	54	40	40	30	49	54
40	32	30	34	31	22	30

#### Duration of Noise Scores

1	30.4	34.4	30.5	20.9	21.2	28.2
2	6.3	5.0	7.3	5.6	8.8	8.4
3	6.0	3.9	5.6	4.1	6.4	6.4
4	21.4	26.2	22.8	32.6	40.6	23.7
5	4.7	3.9	3.4	4.9	1.4	5.0
6	15.8	27.1	33.2	28.0	32.8	36.2
7	7.4	6.1	8.8	9.1	10.2	8.6
8	10.8	13.1	10.3	10.5	8.7	10.1
9	21.4	16.5	20.8	13.1	18.4	16.4
10	35.3	34.7	47.3	34.3	26.2	39.1
11	12.3	11.1	11.0	10.1	14.1	13.8
12	5.7	4.8	10.0	6.5	11.1	6.6
13	11.3	10.3	11.6	12.0	13.6	15.4
14	6.9	8.8	9.8	8.4	12.0	9.3
15	21.5	18.3	20.4	20.3	20.7	21.5
16	3.5	3.7	3.8	7.2	13.5	3.6
17	5.1	4.6	5.9	5.2	9.2	4.9
18	4.1	4.1	4.0	2.8	3.5	3.7



Subjects	Amputation	Blindness	Addiction	Psychiatric	Mental Retardation	Control
19	15.5	27.7	30.8	27.6	28.8	32.0
20	13.8	12.2	12.7	14.8	11.5	14.5
21	64.1	28.0	40.7	42.6	34.5	22.0
22	8.5	9.8	9.7	8.0	12.5	7.9
23	10.6	12.8	10.8	11.7	11.8	10.4
24	12.8	17.8	20.5	13.2	20.2	10.7
25	2.16	23.8	22.3	17.9	40.1	31.5
26	6.3	8.4	5.0	8.5	6.8	11.3
27	5.3	5.7	3.2	8.0	4.8	5.7
28	12.7	14.7	11.2	13.7	16.5	12.4
29	16.8	22.1	21.0	18.3	19.2	22.6
30	6.3	4.5	5.4	4.9	5.3	4.7
31	12.4	17.1	13.0	10.3	11.2	13.1
32	17.0	7.9	18.4	8.2	5.7	16.1
33	10.2	13.5	12.1	15.0	11.5	14.4
34	10.7	12.3	10.3	7.0	7.5	9.0
35	8.3	7.3	8.5	10.4	7.9	11.4
36	4.4	5.0	7.5	4.6	13.4	7.2
37	56.2	67.8	56.5	47.6	50.2	55.0
38	5.7	9.8	5.9	9.9	9.3	10.3
39	40.9	70.6	79.5	14.0	75.0	17.2
40	5.1	4.1	5.4	5.3	5.5	5.0

Total Noise Scores

1	202.7	209.6	167.0	112.9	100.1	140.4
2	11.8	12.8	20.7	11.7	19.7	22.4
3	45.8	33.1	35.5	30.9	48.2	48.4
4	68.9	87.3	68.4	114.1	132.0	80.3
5	29.9	22.9	19.2	25.5	8.6	27.6
6	98.8	192.6	199.2	164.0	196.8	217.2
7	53.6	37.1	55.7	47.0	37.6	37.0
8	75.3	91.8	65.9	71.8	59.1	61.6
9	104.3	91.9	96.9	68.5	72.7	78.6
10	214.2	179.1	308.1	215.1	191.5	232.5
11	60.7	57.5	47.0	55.6	62.4	67.2
12	44.7	60.7	82.0	56.4	89.6	46.1
13	48.8	33.8	44.5	43.0	54.8	58.4
14	32.2	37.2	76.3	39.2	88.5	43.8
15	105.1	94.6	104.3	105.2	104.6	114.0
16	7.0	3.7	8.6	13.7	22.2	7.2
17	30.3	11.8	16.8	15.4	23.9	15.4
18	23.0	28.6	23.4	17.9	18.5	20.3
19	116.8	166.4	199.5	139.7	179.2	215.7
20	92.6	81.3	78.1	92.9	76.6	96.6
21	477.4	115.6	242.3	199.6	220.1	177.3
22	60.5	69.6	67.7	55.4	82.8	55.3
23	63.7	86.5	73.6	70.0	86.7	63.6
24	45.2	62.6	82.0	42.3	58.1	45.5
25	103.0	78.1	77.1	17.9	183.1	118.2
26	12.9	25.5	14.8	10.9	21.2	18.4
27	31.1	19.8	17.7	49.1	24.0	27.5



Subjects	Amputation	Blindness	Addiction	Psychiatric	Mental Retardation	Control
28	62.3	74.4	61.5	72.5	71.8	62.6
29	50.4	102.5	101.6	81.7	92.8	108.6
30	28.5	18.2	22.8	19.9	18.7	20.7
31	51.3	49.4	58.4	38.5	47.9	62.9
32	76.9	41.4	98.9	28.3	25.7	97.0
33	21.8	42.5	38.7	36.6	37.7	45.5
34	88.9	116.1	92.6	59.1	65.3	77.2
35	33.1	35.0	39.2	41.1	40.8	38.8
36	19.7	23.2	31.9	18.0	70.3	24.3
37	397.9	626.5	531.7	411.2	480.8	515.7
38	5.7	9.8	5.9	9.9	9.3	10.3
39	304.5	339.1	468.5	63.0	484.2	118.8
40	20.2	14.5	23.3	19.6	18.1	19.5

### Disability Factor Scale Scores

Subjects	IS	RI	GR	AV	IEC	DI	IFL
1	35	56	71	32	41	43	34
2	24	26	61	43	33	41	30
3	40	52	72	55	42	50	36
4	38	42	67	38	38	27	29
5	35	47	68	42	36	57	32
6	32	54	65	43	37	34	35
7	33	47	66	47	35	40	34
8	39	60	69	31	39	46	39
9	35	51	69	47	43	27	30
10	41	43	65	44	40	53	35
11	36	36	66	51	39	61	26
12	38	40	70	45	37	52	27
13	30	38	69	47	35	51	33
14	36	52	72	46	34	45	36
15	37	59	70	47	34	28	32
16	40	46	63	50	41	55	33
17	34	57	72	56	35	60	29
18	40	37	71	41	37	37	33
19	43	39	60	36	31	45	38
20	40	43	70	53	31	42	39
21	36	62	72	28	36	54	39
22	44	41	72	53	46	56	42
23	39	52	72	43	46	54	34
24	33	52	72	32	32	45	36
25	39	42	71	53	42	69	40
26	40	41	68	51	41	54	28
27	33	39	58	49	40	51	28
28	34	41	71	52	37	45	37
29	36	43	68	55	44	58	32
30	41	38	67	53	40	61	37
31	21	51	67	34	31	40	26
32	42	55	72	48	42	62	42
33	42	49	72	46	42	59	40
34	39	46	71	50	40	68	30





Subjects	IS	RI	GR	AV	IEC	DI	IFL
35	42	51	71	45	38	41	38
36	35	45	66	47	41	48	32
37	35	47	71	57	46	59	32
38	47	39	72	56	48	72	33
39	43	48	72	47	30	57	26
40	33	51	60	50	40	42	30

Rating of Counselor Effectiveness

Subjects	Score
21	22
22	17
23	26
24	27
25	17
26	18
27	25
28	16
29	17
30	28
31	19
32	13
33	22
34	13
35	20
36	28
37	24
38	15
39	28
40	24



## BIBLIOGRAPHY



## BIBLIOGRAPHY

- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J. and Sanford, R. N. The Authoritarian Personality. New York: Harper, 1950.
- Ager, J. W. and Dawes, R. M. The effect of judges' attitudes on judgement. Journal of Personality and Social Psychology, 1965, 1, 533-538.
- Allport, G. W. Attitudes. In C. Murchison (Ed.) Handbook of Social Psychology. Worcester, Mass.: Clark University Press, 1935.
- Allport, G. W. The historical background of modern social psychology. In G. Lindzey (Ed.) Handbook of Social Psychology, Vol. I, Theory and Method. Cambridge, Mass.: Addison-Wesley, 1954.
- Anthony, W. A. The effects of rehabilitation counselor training on attitudes toward the disabled and on the ability to communicate the facilitative conditions. (Doctoral dissertation, State University of New York at Buffalo) Ann Arbor, Mich.: University Microfilms, 1968, No. 68-17, 336.
- Argyle, M. The Psychology of Interpersonal Behavior. Baltimore: Penguin, 1967.
- Arnholter, E. G. Attitudes toward the disabled. Rehabilitation Counseling Bulletin, 1963, 6, 26-30.
- Badt, M. I. Attitudes of university students toward exceptional children and special education. Exceptional Children, 1957, 23, 286-290.
- Barker, R. G., Wright, B. A., Meyerson, L. and Conick, M. R. Adjustment to Physical Handicap and Illness: A Survey of the Social Psychology of Physique and Disability. New York: Social Science Research Council, 1953.
- Bartel, N. R. and Guskin, S. L. A handicap as a social phenomenon. In W. Cruickshank (Ed.) Psychology of Exceptional Children and Youth. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971.
- Baumrind, D. Some thoughts on ethics of research after reading Milgram's "Behavioral Study of Obedience." American Psychologist, 1964, 19, 421-423.
- Bell, A. H. Attitudes of selected rehabilitation workers and other hospital employees toward the physically disabled. Psychological Reports, 1962, 10, 183-186.
- Bogardus, E. S. Measuring social distance. Journal of Applied Sociology, 1925, 9, 299-308.
- Brock, T. C. and Becker, L. A. "Debriefing" and susceptibility to subsequent experimental manipulations. Journal of Experimental Social Psychology, 1966, 2, 314-323.



- Campbell, D. T. The indirect assessment of social attitudes. Psychological Bulletin, 1950, 47, 15-38.
- Campbell, D. T. Social attitudes and other acquired behavior dispositions. In S. Koch (Ed.) Psychology: A Study of a Science, Vol. 6. Investigations of Man as Socius: Their Place in Psychology and the Social Sciences. New York: McGraw-Hill, 1963.
- Campbell, D. T. and Stanley, J. C. Experimental and quasi-experimental designs for research on teaching. In N. L. Gage (Ed.) Handbook of Research on Teaching. Chicago: Rand McNally, 1963.
- Canter, F. The relationship between authoritarian attitudes, attitudes toward mental patients and effectiveness of clinical work with mental patients. Journal of Clinical Psychology, 1963, 19, 124-127.
- Chesler, M. A. Ethnocentrism and attitudes toward the physically disabled. Journal of Personality and Social Psychology, 1965, 2, 877-882.
- Cohen, J. and Struening, E. L. Opinions about mental illness in the personnel of two large mental hospitals. Journal of Abnormal and Social Psychology, 1962, 64, 349-360.
- Cohen, J. and Struening, E. L. Opinions about mental illness: Mental hospital occupational profiles and profile clusters. Psychological Reports, 1963, 12, 111-124.
- Cohen, J. and Struening, E. L. Opinions about mental illness: Hospital Social atmosphere profiles and their relevance to effectiveness. Journal of Consulting Psychology, 1964, 28, 291-298.
- Cohen, O. Prejudice and the blind. In Attitudes Toward Blind Persons. New York: American Foundation for the Blind, 1972.
- Cook, S. W. and Sellitz, C. A multiple-indicator approach to attitude measurement. Psychological Bulletin, 1964, 62, 36-55.
- Cooper, J. B. Emotion in prejudice. Science, 1959, 130, 314-318.
- Cowen, E. L., Bobgrove, P. H., Rockway, A. M., and Stevenson, J. Development and evaluation of an attitude to deafness scale. Journal of Personality and Social Psychology, 1967, 6, 183-191.
- Cowen, E. L., Underberg, R., and Verrillo, R. T. The development of an attitude to blindness scale. Journal of Social Psychology, 1958, 48, 297-304.
- Criswell, J. H. Racial cleavages in Negro-white groups. Sociometry, 1939, 2, 69-75.
- Criswell, J. H. Social structures revealed in a sociometric retest. Sociometry, 1939, 2, 69-75.
- Daves, R. M. Fundamentals of Attitude Measurement. New York: John Wiley and Sons, Inc., 1972.





- DeFleur, M. L., and Westie, F. R. Verbal attitudes and overt acts: An experiment on the salience of attitudes. American Sociological Review, 1958, 23, 667-673.
- DeFleur, M. L., and Westie, F. R. Attitude as a scientific concept. Social Forces, 1963, 42, 17-31.
- Denner, B. Informers and their influence on the handling of illicit information. Paper presented at the meeting of the Midwest Psychological Association, Chicago, May, 1967.
- Deutscher, I. Words and deeds: Social science and social policy. Social Problems, 1966, 13, 235-265.
- Diab, L. N. Studies in social attitudes III: Attitude assessment through semantic differential. Journal of Social Psychology, 1965, 67, 303-314.
- Dow, T. E. Social class and reaction to physical disability. Psychological Reports, 1965, 17, 39-62.
- DuBrow, A. L. Attitudes toward disability. Journal of Rehabilitation, 1965, 31, (7), 25-26.
- Edwards, A. L. Techniques of Attitude Scale Construction. New York: Appleton-Century-Crofts, 1957.
- Ellsworth, R. B. A behavioral study of staff attitudes toward mental illness. Journal of Abnormal Psychology, 1965, 70, 194-200.
- English, R. W. Assessment, modification, and stability of attitudes toward blindness. Psychological Aspects of Disability, 1971, 18, 79-85.
- Farina, A., Holland, C. H., and Ring, K. Role of stigma and set in interpersonal interaction. Journal of Abnormal Psychology, 1966, 71, 421-428.
- Farina, A. and Ring, K. The influence of perceived mental illness on interpersonal relations. Journal of Abnormal Psychology, 1965, 70, 47-51.
- Feinberg, L. B. Social desirability and attitudes toward the disabled. Personnel and Guidance Journal, 1967, 46, 375-381.
- Feinberg, L. B. Nonimmediacy in verbal communication as an indicator of attitudes toward the disabled. Journal of Social Psychology, 1971, 84, 135-140.
- Fendrich, J. A. A study of the association among verbal attitudes, commitment, and overt behavior in different experimental situations. Social Forces, 1967, 45, 347-355.
- Ferneau, E. and Gertler, R. Attitudes regarding alcoholism: Effect of first year of the psychiatry residence. British Journal of the Addictions, 1971, 66, 257-260.
- Fillenbaum, S. and Frey, R. More on the "faithful" behavior of suspicious subjects. Journal of Personality, 1970, 38, 43-51.



- Fishbein, M. Attitude and prediction of behavior. In M. Fishbein (Ed.) Readings in Attitude Theory and Measurement. New York: Wiley, 1967.
- Ford, L. H. and Meisels, M. Social desirability and the semantic differential. Educational and Psychological Measurement, 1965, 25, 465-475.
- Freedman, J. L. and Doob, A. N. Deviancy: The Psychology of Being Different. New York: Academic Press, 1968.
- Freidson, E. Disability as social deviance. In M. Sussman (Ed.) Sociology and Rehabilitation. Washington, D. C.: American Sociological Association, 1965.
- Fuson, W. M. Attitudes: A note on the concept and its research context. American Sociological Review, 1942, 7, 856-857.
- Gellman, W. Roots of prejudice against the handicapped. Journal of Rehabilitation, 1959, 25 (1), 4-6.
- Genskow, J. K. and Maglione, F. D. Familiarity, dogmatism, and the reported student attitudes toward the disabled. Journal of Psychology, 1965, 67, 329-341.
- Getzels, J. W. The assessment of personality and prejudice by the method of paired direct and projective questions. Unpublished doctoral dissertation, Harvard University, 1951.
- Glixman, A. R. Categorizing behavior as a function of meaning domain. Journal of Personality and Social Psychology, 1965, 2, 370-377.
- Goffman, E. Stigma. Englewood Cliffs: Prentice-Hall, Inc., 1963.
- Golding, S. L. and Lichtenstein, E. Confession of awareness and prior knowledge of deception as a function of interview set and approval motivation. Journal of Personality and Social Psychology, 1970, 14, 213-223.
- Goldstein, M. J. The social desirability variable in attitude research. Journal of Social Psychology, 1960, 52, 103-108.
- Golin, A. K. Stimulus variables in the measurement of attitudes toward disability. Rehabilitation Counseling Bulletin, 1970, 14, 20-26.
- Granofsky, J. Modification of attitudes toward the physically disabled. Unpublished doctoral dissertation. Yeshiva University, 1956.
- Green, J. A. Attitudes and situational determinants of intended behavior toward Negroes. (Doctoral dissertation, University of Colorado) Ann Arbor, Mich.: University Microfilms, 1968, No. 68-2644.
- Guetzkow, H., Alger, C. F., Brody, R. A., Noel, R. C., and Snyder, R. C. Simulation in International Relations. Englewood Cliffs: Prentice-Hall, Inc., 1963.



- Guskin, S. L. The influence of labeling upon the perception of subnormality in mentally defective children. American Journal of Mental Deficiency, 1962, 67, 402-406 (A).
- Guskin, S. L. The perception of subnormality in mentally defective children. American Journal of Mental Deficiency, 1962, 67, 53-60 (B).
- Guskin, S. L. Measuring the strength of the stereotype of the mental defective. American Journal of Mental Deficiency, 68, 569-575 (B).
- Guttman, L. A. A basis for scaling qualitative data. American Sociological Review, 1944, 9, 139-150.
- Hammond, K. R. Measuring attitudes by error-choice: An indirect method. Journal of Abnormal and Social Psychology, 1948, 43, 38-48.
- Handel, A. F. Measuring social distance in relations with the blind. Outlook for the Blind, 1960, 54, 361-367.
- Heider, F. The Psychology of Interpersonal Relations. New York: Wiley, 1958.
- Hess, E. H. Attitude and pupil size. Scientific American, 1965, 212, 46.
- Hess, E. H. and Polt, J. M. Pupil size as related to interest value of visual stimuli. Science, 1960, 132, 349-350.
- Himes, J. B. Measuring social distance in relations with the blind. Outlook for the Blind, 1960, 54, 54-58.
- Jaffe, J. Attitudes and interpersonal contact: Relationships between contact with the mentally retarded and dimensions of attitude. Journal of Counseling Psychology, 1967, 14, 482-484.
- Jaffe, J. What's in a name - attitudes toward disabled persons. Personnel and Guidance Journal, 1967, 45, 557-560.
- Jaques, M. E. Rehabilitation Counseling: Scope and Services. Boston: Houghton, Mifflin Company, 1970.
- Jones, E. E. and Kohler, R. The effects of plausibility on the learning of controversial statements. Journal of Abnormal and Social Psychology, 1958, 57, 315-320.
- Jones, E. E. and Sigall, H. The bogus pipeline: A new paradigm for measuring affect and attitudes. Psychological Bulletin, 1971, 70, 349-364.
- Jordan, J. E. Attitudes toward education and physically disabled persons in eleven nations. East Lansing, Mich.: Michigan State University, 1968.
- Joslin, L. C. Knowledge and counselor competence. Personnel and Guidance Journal, 1965, 43, 790-795.
- Kagan, N. Three dimensions of counselor encapsulation. Journal of Counseling Psychology, 1964, 11, 361-365.



- Kelly, H. H., Hastorf, A. H., Jones, E. E., Thibaut, J. W., and Usdane, W. M. Some implications of social psychological theory for research on the handicapped. In L. H. Lofquist (Ed.) Psychological Research and Rehabilitation. Washington, D. C.: American Psychological Association, 1960.
- Kelman, H. C. Human use of human subjects: The problem of deception in social psychological experiments. Psychological Bulletin, 1967, 67, 1-11.
- Kleck, R. E. Stigma conditions as elicitors of behavior in face-to-face interaction. Paper presented at the meeting of the American Psychological Association, San Francisco, 1968.
- Kleck, R., Ono, H., and Hastorf, A. The effects of physical deviance upon face-to-face interaction. Human Relations, 1966, 19, 425-436.
- Kohler, M. E. The personnel problems of the blind student in a university. M. A. thesis. University of Minnesota, 1933.
- Koslin, B. L. and Pargament, R. Effects of attitude on the discrimination of opinion statements. Journal of Experimental Social Psychology, 1969, 5, 245-264.
- Kurtz, N., Kurtz, R., and Hoffnung, R. Attitudes toward the lower- and middle-class psychiatric patient as a function of authoritarianism among mental health students. Journal of Consulting and Clinical Psychology, 1970, 35, 338-341.
- Kutner, B. The social psychology of disability. In W. S. Neff (Ed.) Rehabilitation Psychology. Washington, D. C.: American Psychological Association, 1971.
- Kutner, B., Wilkins, C., and Yarrow, P. R. Verbal attitudes and overt behavior involving racial prejudice. Journal of Abnormal and Social Psychology, 1952, 47, 649-652.
- LaFave, L., Sherif, M. Reference scale and placement of items with the Own Categories Technique. Journal of Social Psychology, 1968, 76, 75-82.
- LaPiere, R. T. Attitudes vs. actions. Social Forces, 1934, 13, 230-237.
- Levine, J. M. and Murphy, G. The learning and forgetting of controversial material. Journal of Abnormal and Social Psychology, 1943, 38, 507-517.
- Levy, L. Awareness, learning and the beneficent subject as expert witness. Journal of Personality and Social Psychology, 1967, 6, 363-370.
- Lichtenstein, E. Admission of prior information about deceptive experimental procedures. Unpublished manuscript. University of Oregon, 1968.
- Likert, R. A technique for the measurement of attitudes. Archives of Psychology, 1932, 140, 5-53.
- Linn, L. S. Verbal attitudes and overt behavior: A study of racial discrimination. Social Forces, 1965, 44, 353-364.



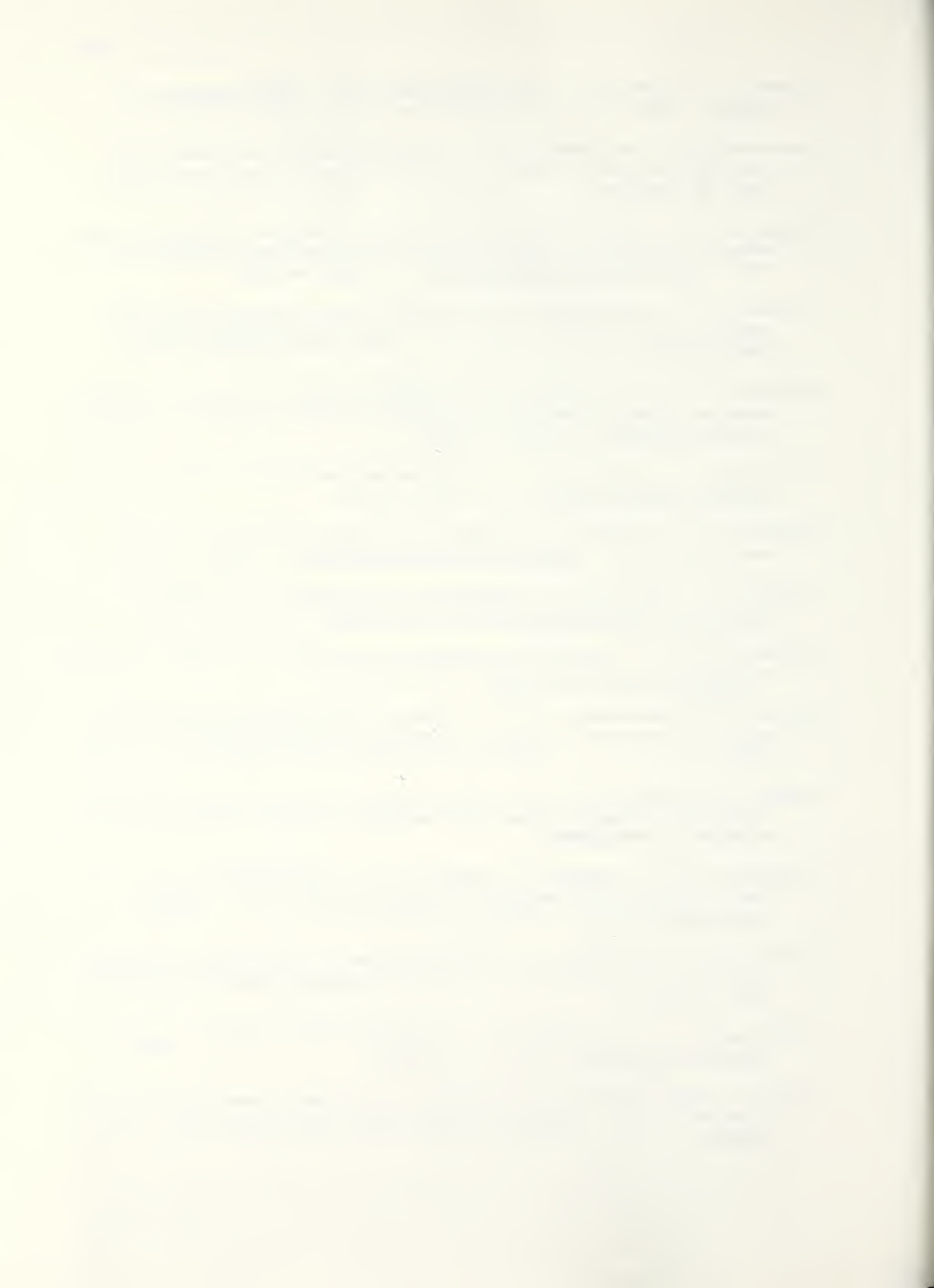




- Linkowski, D. C. and Jaques, M. E. The assessment of attitudes toward physical, mental, and social differences. Rehabilitation Counseling Bulletin, 1964, 32, 203-210.
- Loeb, A., Wolf, A., Rosen, M., and Rutman, I. The influence of diagnostic label and degree of abnormality on attitudes toward former mental patients. Community Mental Health, 1968, 4, 334-339.
- Lukoff, I. F. Attitudes toward the blind. In Attitudes Toward Blind Persons. New York: American Foundation for the Blind, 1972.
- Lukoff, I. F. and Whiteman, M. Attitudes toward blindness: Some preliminary findings. New Outlook for the Blind, 1961, 55, 154-160.
- Mackey, R. Views of caregiving and mental-health groups about alcoholics. Quarterly Journal of Studies on Alcohol, 1969, 30, 665-671.
- Mam, J. H. The relationship between cognitive, affective, and behavioral aspects of racial prejudice. Journal of Social Psychology, 1959, 49, 223-228.
- McGuire, W. J. Suspiciousness of experimenter's intent. In R. Rosenthal and R. Rosnow (Eds.) Artifact in Behavioral Research. New York: Academic Press, 1969.
- Mehrabian, A. Inference of attitudes from the posture, orientation, and distance of a communicator. Journal of Consulting and Clinical Psychology, 1968, 32, 296-308.
- Morgan, J. J. Attitudes of students toward the Japanese. Journal of Social Psychology, 1945, 21, 219-227.
- Mussen, P. H. The reliability and validity of the Horowitz Faces Test. Journal of Abnormal and Social Psychology, 1950, 45, 504-506 (A).
- Mussen, P. H. Some personality and social factors related to social changes in children's attitudes toward Negroes. Journal of Abnormal and Social Psychology, 1950, 45, 423-441 (B).
- Mussen, P. H. and Barker, R. G. Attitudes toward cripples. Journal of Abnormal and Social Psychology, 1944, 39, 351-355.
- Noonan, J. R., Barry, J. R., and Davis, H. C. Personality determinants in attitudes toward visible disability. Journal of Personality, 1970, 38 (1), 1-15.
- Nunnally, J. C. Popular Conceptions of Mental Health. New York: Holt, 1961.
- Nunnally, J. C. and Kittross, J. M. Public attitudes toward mental health professions. American Psychology, 1958, 13, 589-594.
- Orne, M. T. On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. American Psychologist, 1962, 17, 776-783.



- Osgood, C. E., Suci, G. J., and Tannenbaum, P. H. The Measurement of Meaning, Urbana, Ill.: University of Illinois Press, 1957.
- Palmerton, K. E. and Frumkin, R. M. College counselor knowledge about and attitudes toward disabled persons. Perceptual and Motor Skills, 1969, 28, 657-658.
- Palmerton, K. E. and Frumkin, R. M. College counselors' attitudes toward education considered a determinant of attitudes toward disabled persons. Perceptual and Motor Skills, 1969, 28, 441-442.
- Palmerton, K. E. and Frumkin, R. M. Contact with disabled persons and intensity of counselors' attitudes. Perceptual and Motor Skills, 1969, 28, 434.
- Palmerton, K. E. and Frumkin, R. M. Type of contact as a factor in attitudes of college counselors toward the physically disabled. Perceptual and Motor Skills, 1969, 28, 489-490.
- Patterson, C. H. Selection of rehabilitation counseling students. Personnel and Guidance Journal, 1962, 41, 318-324.
- Philips, D. L. Rejection: A possible consequence of seeking help for mental disorders. American Sociological Review, 1963, 28, 963-972.
- Porier, G. W. and Lott, A. J. Galvanic skin responses and prejudice. Journal of Personality and Social Psychology, 1967, 5, 253-259.
- Proshansky, H. M. A projective method for the study of attitudes. Journal of Abnormal Social Psychology, 1943, 38, 393-395.
- Rankin, R. E. and Campbell, D. T. Galvanic skin responses to Negro and white experimenters. Journal of Abnormal Social Psychology, 1955, 51, 30-33.
- Reich, J. and Sherif, M., 1963. Ego-involvement as a factor in attitude assessment by the Own Categories Technique. Norman: University of Oklahoma (mimeographed).
- Richardson, S. A., Goodman, N., Hastorf, A. H., and Dornbush, S. M. Cultural uniformity in reaction to physical disabilities. American Sociological Review, 1961, 26 (2), 241-247.
- Rickard, T. E., Triandis, H. C., and Patterson, C. H. Indices of employer prejudice toward disabled applicants. Journal of Applied Psychology, 1963, 47, 52-55.
- Riddleberger, A. B. and Motz, A. B. Prejudice and perception. American Journal of Sociology, 1957, 62, 498-503.
- Ring, K. Experimental social psychology: Some sober questions about some frivolous values. Journal of Experimental Social Psychology, 1967, 3, 113-123.



- Roether, G. A. Significance of public attitudes in the rehabilitation of the disabled. Rehabilitation Literature, 1961, 22, 66-72.
- Rokesch, M., and Mezei, L. Race and shared belief as factors in social choice. Science, 1966, 151, 167-172.
- Rosenberg, M. J. and Abelson, R. P. An analysis of cognitive balancing. In M. J. Rosenberg et al., Attitude Organization and Change. New Haven: Yale University Press, 1960, 112-163.
- Rusalew, H. The environmental supports of public attitudes toward the blind. Outlook for the Blind, 1950, 44, 277-288.
- Sarbin, T. R. and Mancuso, J. C. Failure of a moral enterprise: Attitudes of the public toward mental illness. Journal of Consulting and Clinical Psychology, 1970, 35, 159-173.
- Schofield, L. F. and Kuncz, J. Client disability and counselor behavior. Rehabilitation Counseling Bulletin, 1971, 14, 158-165.
- Schwebel, M. Role-playing in counselor training. Personnel and Guidance Journal, 1953, 32, 196-201.
- Scott, R. A. Comments about interpersonal processes of rehabilitation. In M. Sussman (Ed.) Sociology and Rehabilitation. Washington, D. C.: American Sociological Association, 1965.
- Scott, R. A. The Making of a Blind Man. New York: Russel Sage Foundation, 1969.
- Scott, W. A. Attitude measurement. In G. Lindzey and E. Aronson The Handbook of Social Psychology, Vol. II, Research Methods. Reading, Mass.: Addison-Wesley, 1968.
- Sellitz, C., Edrich, J., and Cook, S. W. Ratings of favorableness of statements about a social group as an indicator of attitude toward the group. Journal of Personality and Social Psychology, 1965, 2, 408-415.
- Sellitz, C., Jahoda, M., Deutsch, M., and Cook, S. W. Research Methods in Social Relations. New York: Holt, Rinehart, 1959.
- Semmel, M. and Dickson, S. Connotative reactions of college students to disability labels. Exceptional Children, 1966, 32, 443-450.
- Shaw, M. E. and Wright, J. M. Scales for the Measurement of Attitudes. New York: McGraw-Hill, 1967.
- Shears, L. M. and Jensema, C. J. Social acceptability of anomalous persons. Exceptional Children, 1969, 36, 91-96.
- Sherif, M. and Hovland, C. I. Social Judgement: Assimilation and Contrast Effects in Communication and Attitude Change. New Haven: Yale University Press, 1961.





- Sigall, H. and Page, R. Current stereotypes: A little fading, a little faking. Journal of Personality and Social Psychology, 1971, 18, 247-255.
- Siller, J. Components of attitudes toward the disabled: Theory and experimental schema. American Psychologist, 1966, 21, 616.
- Siller, J. Generality of attitudes toward the physically disabled. Proceedings, 78th Annual Convention - American Psychological Association, 1970.
- Siller, J. Reactions to physical disability, Rehabilitation Counseling Bulletin, 1963, 7, 12-16.
- Siller, J. and Chipman, A. Factorial structure and correlates of the Attitudes Toward Disabled Persons Scale. Educational and Psychological Measurement, 1964, 24, 831-840.
- Siller, J., Chipman, A., Ferguson, L., and Vann, D. H. Attitudes of the nondisabled toward the physically disabled. Studies in Reactions to Disability: XI. New York University, May, 1967.
- Siller, J., Ferguson, L., Vann, D., and Holland, B. Structure of attitudes toward the physically disabled. Studies in Reactions to Disability: XII. New York University, November, 1967.
- Silverman, B. I. and Cochrane, R. The relationship between verbal expressions of behavioral intention and overt behavior. Journal of Social Psychology, 1971, 84, 51-56.
- Sloat, Wilbur L. and Frankel, Anan. The contributions of subjects, disabilities, situations, sex of target person, and items to the variation of attitudes toward persons with a disability. Rehabilitation Psychology, 1972, 19 (1), 3-17.
- Snider, J. G. and Osgood, C. E. Semantic Differential Technique: A source-book. Chicago: Aldine Publishing Company, 1969.
- Sommer, R. On the Brown adaptation of the Rosenzweig P-F for assessing social attitudes. Journal of Abnormal and Social Psychology, 1954, 49, 125-128.
- Stanton, H., Back, K. W., and Litwak, E. Role-playing in survey research. American Journal of Sociology, 1956, 62, 172-176.
- Stanton, H. R. and Litwak, E. Toward the development of a short form test of interpersonal competence. American Sociological Review, 1955, 20, 668-674.
- Straus, R. Social change and the rehabilitation concept. In M. B. Sussman (Ed.) Sociology and Rehabilitation. Washington, D. C.: American Sociological Association, 1965.
- Stricker, L. The true deceiver. Psychological Bulletin, 1967, 68, 13-20.





- Stricker, L., Messick, S., and Jackson, D. N. Suspicion of deception: Implications for conformity research. Journal of Personality and Social Psychology, 1967, 5, 379-389.
- Strong, E. K. Change of Interests with Age. Stanford University: Stanford University Press, 1931.
- Struening, E. L. and Cohen, J. Factorial invariance and other psychometric characteristics of the five opinions about mental illness factors. Educational and Psychological Measurement, 1963, 23, 289-298.
- Taylor, J. B. What do attitude scales measure: The problem of social desirability. Journal of Abnormal and Social Psychology, 1961, 62, 386-390.
- Thistlethwaite, D. Attitude and structure as factors in the distortion of reasoning. Journal of Abnormal and Social Psychology, 1950, 45, 442-458.
- Thurstone, L. L. Attitudes can be measured. American Journal of Sociology, 1928, 33, 529-554.
- Tittle, C. R. and Hill, R. J. Attitude measurement and prediction of behavior: An evaluation of conditions and measurement techniques. Sociometry, 1967, 30, 199-213.
- Wang, D. D. Employer, parent and trainee attitudes toward the rehabilitation of the mentally retarded. Fourth progress report, Special Project RD 383. Washington, D. C.: Vocational Rehabilitation Administration, 1962.
- Warner, L. G. and DeFleur, M. Attitude as an interactional concept: Social constraint and social distance as intervening variables between attitudes and actions. American Sociological Review, 1969, 34, 153-169.
- Weschler, I. R. An investigation of attitudes toward labor and management by means of the error-choice method. Journal of Social Psychology, 1950, 32, 51-67.
- Westie, F. R. and DeFleur, M. L. Autonomic responses and their relationships to race attitudes. Journal of Abnormal and Social Psychology, 1959, 58, 340-347.
- Whiteman, M. and Lukoff, I. F. Attitudes toward blindness in two college groups. Journal of Social Psychology, 1964, 63, 179-191 (A).
- Whiteman, M. and Lukoff, I. F. A factorial study of sighted people's attitudes toward blindness. Journal of Social Psychology, 1964, 64, 339-353 (B).
- Whiteman, M. and Lukoff, I. F. Attitudes toward blindness and other physical handicaps. Journal of Social Psychology, 1965, 66, 135-145.
- Wicker, A. W. Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects. Journal of Social Issues, 1969, 25, 41-78.



## VITA

The writer was born in Pittsburgh, Pennsylvania, March 31, 1944. He attended St. Andrews Seminary in Rochester, New York and St. Vincent College in Latrobe, Pennsylvania receiving a Bachelor of Arts in Philosophy in June, 1966. After teaching high school English and History in Sharpsburg, Pennsylvania, he attended Western Michigan University and received a Master of Arts Degree in 1968 in Orientation and Mobility for the Visually Handicapped. He was employed as an Orientation and Mobility Specialist by the Western Pennsylvania School for Blind Children from 1968 to 1970. In September, 1970 he joined the Department of Special Education and Rehabilitation of the University of Pittsburgh as an Assistant Instructor in Orientation and Mobility and as a doctoral student in Rehabilitation Counseling. In April, 1973, he was appointed Director of the Senior Citizens Service Center in McKees Rocks, Pennsylvania.







BF698 Welsh, Richard Leo. c.1  
W465 ATTITUDES AND BEHAVIORS  
At84 OF REHABILITATION COUNSELING  
STUDENTS AND GRADUATES  
TOWARDS STIGMATIZED PERSONS.  
(1973)

Date Due

BF698

c.1

W465

At84 Welsh, Richard Leo.

ATTITUDES AND BEHAVIORS OF  
REHABILITATION COUNSELING

STUDENTS AND GRADUATES TOWARD  
STIGMATIZED PERSONS. (1973)

DATE

ISSUED TO

*Reference Copy*

AMERICAN FOUNDATION FOR THE BLIND  
15 WEST 16th STREET  
NEW YORK, N. Y. 10011

